

Interim authorization was divided into two phases by EPA. Phase I covered aspects of hazardous waste regulation other than technical standards for facilities and issuance of permits for storage, treatment, and disposal facilities. Phase II covered these remaining elements.

Massachusetts obtained Phase I interim authorization in February, 1981. On October 21, 1983, the Department applied for interim authorization for Phase II. As required by EPA, this application consisted of the following:

- A program description, setting forth the text of the pertinent statutes and regulations and explaining how the Department proposed to enforce them;
- A proposed Memorandum of Agreement between the Department and EPA, setting forth ways in which the two agencies would work together to carry out their responsibilities;
- An Authorization Plan, setting forth the steps the Department proposed to take to qualify for final authorization under RCRA; and
- An Attorney General's statement analyzing the Department's legal authority to undertake the actions described in the Program Description, the Memorandum of Agreement, and the Authorization Plan.

On December 22, 1983, EPA held a public hearing on the application by Massachusetts. Everyone who testified supported Phase II interim authorization for the State program as it was then presented to EPA.

On December 20, 1983, EPA's Regional Office in Boston submitted written comments on the state's application. Some of the comments asked the Department or the Attorney General to clarify various aspects of the state regulations. However, there were a number of comments to the effect that, unless the Department agreed to amend certain provisions of its hazardous waste regulations prior to filing its application for final authorization, and further agreed to change the implementation of certain regulations pending the adoption of amendments to their provisions, EPA would have no alternative but to deny the application for Phase II interim authorization.

Denial of authorization would have serious adverse impacts on both the Department and on regulated industries in Massachusetts. The regulated community would have to comply with both state and federal requirements, with attendant dual reporting, dual inspections and dual permitting. In all likelihood, there would be a decrease in the level of federal funding available for operation of the state program; this could lead to a significant loss of state personnel.

In this situation, the Department has determined that there is only one viable option: to achieve Phase II interim authorization, and ultimately, final authorization of the state program. The Department must propose to amend its regulations so as to achieve equivalence with the federal regulations.

The Department chose a deferred effective date of July 1, 1985, based on the following assumptions:

- EPA has informed the Department that promulgation of recycling regulations is a top priority, and may occur by January, 1985.
- If EPA's final recycling regulations require further modification of the Department's regulations, the Department estimates that it would take several months to hold the required public hearings and make such modifications.
- The Department thinks a margin of error of 2-3 months is appropriate.

If EPA's final recycling regulations are more stringent than 310 CMR 30.355, 30.356, 30.381, 30.382, 30.383, the Department intends to amend them as necessary to allow Massachusetts to qualify for final authorization pursuant to RCRA. If such amendments require further public comment and public hearings, the Department intends to solicit such comment and hold such hearings. However, if events show that the July 1, 1985 deferred effective date is based on erroneous assumptions, the Department intends to adopt, without further public comment or hearings, whatever deferred effective date is necessary to carry out the intended effect of the amended Department regulation.

As part of this rule-making process, the Department is willing to consider accomplishing the intended effect of this regulation by the alternative approach of comprehensively rewriting 310 CMR 30.143(2), 30.355, 30.356, 30.381, 30.382, and 30.383. However, the Department is now of the opinion that the alternative of deferring the effective date is superior. This alternative requires the adoption of one transition regulation now and the possible rewriting of six regulations later if, and only if, EPA adopts recycling regulations making such action necessary. The other alternative would require comprehensively rewriting six regulations now and again in a few months regardless of what EPA does.

Extraction Procedure Toxicity Test

The Department has promulgated an emergency regulation which modifies its extraction procedure toxicity test and the Department is now proposing to make this amendment permanent.

The Extraction Procedure (E.P.) Toxicity test, as currently in effect in the EPA regulations, was different in one respect from the EP Toxicity test originally found in the state regulations at 310 CMR 30.125. The EPA regulations require that a generator, when testing for chromium, test for both trivalent and hexavalent chromium (i.e., total chromium) in the extract derived from the testing procedure. The Massachusetts regulations had required a test for only hexavalent chromium. Hexavalent chromium is the constituent of greater concern because of its toxicity.

Although the EPA regulation was different from the original Massachusetts regulation, the effect of the EPA regulations was not substantially different from the effect of the original Massachusetts regulation. This is because, on October 30, 1980, EPA provided generators, whose waste would be hazardous solely because it failed the EP Toxicity test for total chromium, with the opportunity to have their waste declassified as hazardous. Generators, on an individual basis or on an industry-wide basis, may petition the EPA to declassify their waste as hazardous. EPA will grant such a request if the generator(s) can demonstrate that the following criteria are met:

DISCUSSION DRAFT

The purpose of this Discussion Draft is two-fold. First, it is intended to explain the changes which the Department of Environmental Quality Engineering proposes to make in its hazardous waste regulations. Second, it announces certain policies which the Department intends to implement immediately pending the adoption of these proposed regulations.

I. Explanation of Proposed Regulatory Changes Necessary for Authorization

A. Overview

On July 1, 1982, the Department's hazardous waste regulations for "Phase I" took effect. These regulations identified hazardous wastes either by name or by characteristic; prescribed requirements governing the generation, accumulation, and transportation of hazardous waste; established management standards for the storage, use, treatment, and disposal of hazardous waste; and established licensing procedures.

On October 15, 1983, the Department's regulations for Phase II took effect. These regulations prescribed technical standards for the storage, treatment, and disposal of hazardous waste; established location standards for hazardous waste facility sites; prescribed requirements for financial responsibility; set up a regulatory system designed to encourage the recycling of hazardous waste under a Departmental approval process; and made several modifications to the Phase I regulations.

There were several reasons for the promulgation of these regulations. Their primary purpose is to protect public health, safety, welfare and the environment. This was the most important mandate to the Department by the Legislature when it enacted the Massachusetts Hazardous Waste Management Act, G.L. c. 21C. Chapter 21C provides the statutory authority for promulgation of these regulations.

Another purpose of the hazardous waste regulations was to comply with the Legislature's mandate to "secure for the Commonwealth the benefits of" the Resource Conservation and Recovery Act ("RCRA"), the federal hazardous waste management statute. Section 3006 of that statute requires the Environmental Protection Agency to authorize states which qualified to operate their hazardous waste management programs in lieu of the federal program. Such authorization could be given in two stages. Until EPA had adopted all of its regulations, states could qualify for interim authorization by showing that their hazardous waste programs were "substantially equivalent" to the federal program. Once EPA adopted all of its regulations, states could qualify for final authorization by showing that their hazardous waste programs were "equivalent to" and "consistent with" the federal program. Interim authorization was to cease 24 months after the effective date of the last EPA regulations governing hazardous waste management. EPA adopted these last regulations, setting standards for landfill disposal of hazardous waste, on July 26, 1982. They took effect six months later, on January 26, 1983. All interim authorizations, therefore, will expire on January 26, 1985 (unless Congress extends the deadline through an amendment to RCRA). EPA has specified that states which want to obtain final authorization by that date must submit a final application before July 1, 1984.

Because EPA required that some of the requisite amendments actually be put into effect prior to granting interim authorization and because of the shortness of time, it has been necessary for the Department to effect certain regulatory changes as emergency regulations. If public hearings are not held within 90 days after the promulgation of emergency regulations, the emergency regulations will no longer be in effect. Therefore, the Department is proposing to render these emergency regulations permanent (i.e., extend their effectiveness beyond the 90-day period). Additional hearings would be needed to once again change these regulations if that is ever necessary or desirable. Those amendments, promulgated as emergency regulations, pertain to the following:

- 1) Reuse and Recycling of Hazardous Waste,
- 2) Extraction Procedure Toxicity Test,
- 3) Financial Responsibility for Interim Status Facilities,
- 4) Change in Ownership of Interim Status facilities,
- 5) Notice of Bankruptcy,
- 6) Modification of Post-Closure Plans; and
- 7) Signing of License Applications.

Discussion of these amendments, promulgated on March 15, 1984, is included in this Discussion Draft along with other proposed regulatory changes required to qualify for final authorization.

B. Emergency Regulations

Reuse and Recycling of Hazardous Waste

The most significant of the regulatory changes which was promulgated as an emergency regulation to qualify for authorization, governs the reuse and recycling of hazardous waste. The Department is proposing to make this regulatory change permanent.

The present Massachusetts regulations are, in general, more stringent than the corresponding federal regulations. Commercial off-site facilities which recycle wastes must be licensed; all wastes sent to be recycled must be shipped by a licensed transporter and be accompanied by a manifest.

However, the regulations provide that hazardous waste may be reused or recycled, with a lesser degree of regulation, in situations involving the following:

- direct reuse of hazardous waste by an end-user, (310 CMR 30.355);
- combustion of hazardous waste by the generator at a fossil fuel facility owned and operated by the generator, (310 CMR 30.356);
- recycling of hazardous waste by the end-user at the site of utilization, (310 CMR 30.381);

- recycling of hazardous waste by the generator at a site other than the site of generation, i.e., intra-company recycling, (310 CMR 30.382); and
- recycling of hazardous waste by the generator at the site of generation, (310 CMR 30.383).

Reuse and recycling of hazardous waste in any of these instances requires prior written approval by the Department. In addition, a number of additional safeguards are applicable to such activity.

EPA's regulations are quite different. They do not cover reused or recycled wastes which are hazardous solely because of their characteristics (except sludges). Such wastes may be reused or recycled without being subject to EPA regulations. Not only is the actual reuse or recycling of such hazardous waste exempt from regulation, but also its generation, accumulation, transport and storage prior to its being reused or recycled. On the other hand, if the material to be reused or recycled is a sludge or a listed hazardous waste, it must be handled in full compliance with all hazardous waste regulations governing generation, accumulation, transport and storage prior to being reused or recycled. However, the actual process of reuse or recycling is not regulated by EPA. This means that a facility for reuse or recycling of wastes must obtain a RCRA permit to store wastes. (The only exception would be if the hazardous waste was recycled at the site of generation less than 90 days after it was generated.)

EPA has determined that to qualify for interim (and final) authorization, the Department must amend its regulations so that the reuse or recycling of listed hazardous wastes and sludges on terms less stringent than those of EPA's present regulations (40 CFR § 261.6) is no longer allowed. When EPA amends its regulations on this matter, as it expects to do within a year, there may be need for further amendment of the corresponding state regulations. Proposed amendments to EPA's recycling regulations were published in the Federal Register on April 4, 1983.

Accordingly, the Department has amended, by emergency regulation, 310 CMR 30.0 the section of the hazardous waste regulations which contains transition provisions and is proposing to make this amendment permanent. A new subsection (12) has been added which defers the effective date of 310 CMR 30.143(2) until July 1, 1985. 310 CMR 30.143(2) is the regulation which specifies that if hazardous waste is approved for reuse or recycling, pursuant to 310 CMR 30.355, 30.356, 30.381, 30.382, or 30.383, such hazardous waste is not subject to any other hazardous waste regulation except those found in 310 CMR 30.001 through 30.059. Amended 310 CMR 30.099(12) further provides that, until July 1, 1985, hazardous waste is exempt from hazardous waste regulations other than 310 CMR 30.001 through 30.059, only if the waste is approved for reuse or recycling pursuant to one of the five regulations listed above and such waste is not a sludge and not a listed hazardous waste. The intended effect of this regulation is to prohibit the granting of any approval for the reuse or recycling of hazardous waste which is a sludge or a listed hazardous waste, and to require the modification or revocation of any such approval already granted, pending promulgation by EPA of final recycling regulations.

Other Emergency Regulations

A number of additional regulatory amendments were promulgated as emergency regulations. The Department is now proposing to make these changes permanent. The changes include the following:

310 CMR 30.064 and 30.099 each referred to 40 CFR Part 122, EPA's original permitting regulations. Those regulations were renumbered and are now known as 40 CFR Part 270. The Department promulgated an emergency regulation to amend 310 CMR 30.064 and 30.099 to reflect this change.

EPA's financial responsibility regulations specify that surety bonds are acceptable for guaranteeing performance of closure and post-closure care by facilities which have been issued licenses, but not by interim status facilities. (Compare 40 CFR 264.143(c) and 264.145(c) with 40 CFR 265.143, 265.145.) The Department's financial responsibility regulations had provided that such bonds were acceptable for all facilities. (310 CMR 30.099(6), 30.904 and 30.906.) The Department did not intend to authorize any financial responsibility mechanism not authorized by EPA. Accordingly, the Department promulgated an emergency regulation to amend 310 CMR 30.099(6) to preclude interim status facilities from using surety bonds to guarantee performance of closure and post-closure care.

EPA's regulations require that post-closure plans and amendments to such plans be subject to the full public participation process. The Department's regulations did not contain such a provision for facilities which close under interim status. Therefore, the Department promulgated an emergency regulation to correct this deficiency (310 CMR 30.099(6)(b)).

EPA's permitting regulations, specifically 40 CFR 270.72(d), require the submission of a revised Part A notification at least 90 days before a change may occur in the ownership or operational control of an interim status facility. Department regulations did not impose a similar requirement. Accordingly, the Department adopted an emergency regulation which added a new subsection, 310 CMR 30.099(10), to impose this requirement on all interim status facilities. It should be noted that if the facility is licensed, the provisions of 310 CMR 30.828 apply. That regulation repeats a statutory prohibition against transfer of hazardous waste licenses.

EPA's facility regulations require the facilities to give notice within 10 days after they are named as debtors in bankruptcy proceedings. (40 CFR 264.148(a) and 265.148(a).) The Department's regulations require licensees (but not other facilities which are not licensed) to submit an annual statement of financial condition. (310 CMR 30.825). The purpose of this regulation is to allow the Department to detect signs of financial weakness before bankruptcy occurs. There is no good reason why both regulations cannot and should not be enforced. Accordingly, the Department promulgated an emergency regulation which added new subsections, 310 CMR 30.099(11) and 30.822(10) to be equivalent to EPA's regulations on this subject.

- (1) The chromium in the waste is exclusively (or nearly exclusively) trivalent chromium;
- (2) The waste is generated from an industrial process which uses trivalent chromium exclusively (or nearly exclusively) and the process does not generate hexavalent chromium; and
- (3) The waste is typically and frequently managed in non-oxidizing environments.

The EPA has determined that certain wastes, in particular, those wastes identified in 40 CFR, Section 261.4(b)(6)(ii) and primarily generated by the tannery industry, meet the criteria listed above. Therefore, generators of such wastes need not petition the EPA. Other generators must petition the EPA and make this demonstration in order to have their waste declassified. The only significant difference between the EPA regulations and the original Massachusetts regulations was that, in Massachusetts, these generators did not need to petition the Department to have their waste declassified as hazardous. They needed only to determine that their waste did not fail the EP Toxicity test for hexavalent chromium.

EPA had indicated to the Department that the Massachusetts regulatory approach was adequate to ensure that the first two criteria are satisfied, but that it was inadequate to ensure that the third criterion is satisfied (i.e., that the waste is managed in a non-oxidizing environment). It is important to ensure that trivalent chromium wastes are not oxidized to the hexavalent form because of the toxic properties of hexavalent chromium.

Therefore, the Department has been required to adopt the current EPA regulatory approach in order to ensure that Massachusetts receives final authorization to implement the complete hazardous waste program in lieu of the EPA. The Department is now proposing to make this emergency regulatory change permanent.

It is important to note that the EPA has proposed to base the EP Toxicity test on hexavalent chromium instead of total chromium (see October 30, 1980 Federal Register). However, the EPA has not issued this regulation in final form and has reopened the comment period on this matter on May 17, 1983. The petitioning process in EPA's regulations is an effort to reduce the regulatory burden on industries which produce trivalent chromium-containing wastes until such time as the EPA has made a final ruling on the EP Toxicity test.

Once it has made a determination, EPA will take final regulatory action on this matter. If regulatory action to base the EP Toxicity test on hexavalent chromium is taken by EPA before July 1, 1984, the Department may not need to make permanent the amended regulation pertaining to the EP Toxicity test, as is being proposed herein. (July 1, 1984, is the deadline for the Department to submit to EPA its application for final authorization.)

Concurrently with the EPA, the Department, with the assistance of the Identification and Listing Subcommittee of the Hazardous Waste Advisory Committee, is investigating whether chromium containing wastes should be regulated on the basis of total chromium or hexavalent chromium. A key issue is whether common waste disposal methods (e.g., landfilling) may be conducive to the oxidation of chromium from the trivalent to the hexavalent form. The Department continues to seek comment on this matter.

The Department is aware that EPA is developing a guidance manual pertaining to implementation of its groundwater protection regulations. This document will outline a procedure whereby an owner or operator can avoid analyzing for each hazardous constituent by utilizing screening techniques which enable the owner or operator to rule out the presence in the groundwater of certain categories of hazardous constituents. This procedure should, to a large extent, achieve the same objective that the Department sought when developing its Phase II regulations. Therefore, although the Department is proposing to amend its regulations to be equivalent to EPA's, with the addition of EPA's guidance document, the Department's amended regulations may be implemented in a manner that ensures cost-effective utilization of resources.

The second issue raised by EPA concerns the length of the compliance period during which the groundwater protection standards apply. The compliance monitoring period begins once hazardous constituents have been detected in the groundwater. The EPA regulations require that this period be at least equal to the number of years of the active life of the waste management area, including any waste management activity prior to licensing, plus the closure period. The Department's regulations do not contain this provision.

In the Phase II regulations, the Department favored a procedure for determining the compliance period which would allow the Department to set a compliance period on a case-by-case basis, taking into consideration site-specific factors. Such factors may have included a review of:

- (1) the nature of the waste;
- (2) the hydrogeology of the site;
- (3) any upgrading or retrofitting that is undertaken with regard to the regulated unit; and
- (4) any corrective action taken at the site (e.g., treatment of groundwater).

However, since EPA's regulations contain no provisions for case-by-case review, it is possible that the compliance period set by the Department could sometimes be a shorter length of time than that mandated by EPA's regulations. Because of this, EPA has indicated that it considers the Department's regulations less stringent than the EPA regulations. Therefore, the Department is proposing to amend 310 CMR 30.670 to be equivalent to the corresponding EPA regulation (40 CFR 264.96).

Public Participation in the Permitting Process

EPA's regulations provide that "any interested person" has the right to request that a permit be modified or revoked; EPA has the duty to respond to each such request. (40 CMR §124.5). The public participation provisions of the Department's hazardous waste regulations provide that certain persons, including the permittee or local officials may request a permit notification or revocation; however, they do not stipulate that "any interested person" may do so.

The Department promulgated an emergency regulation which amended the first sentence of 310 CMR 30.592(1) to make more clear what is already the case, i.e., that the responsibility of a facility owner or operator to provide required post-closure care is not dependent on the issuance or terms of a license and survives the expiration or termination of a license, and that the responsibility of the Department to enforce post-closure requirements is subject to all of the hazardous waste regulations, including 310 CMR 30.593(3). That subsection provides that the Department must implement the public participation requirements 310 CMR 30.833, 30.835, 30.836, 30.837, 30.839, 30.851 and 30.852 at any time the Department wants post-closure care to be carried out in a manner different from what is prescribed in an approved post-closure plan.

The Department promulgated an emergency regulation which amended 310 CMR 30.807(1)(a) to add a requirement that whenever a permit applicant is a corporation, the application must be signed by a principal executive officer of at least the level of vice-president. EPA imposes this requirement pursuant to 40 CFR §270.11(a)(1).

C. Additional Proposed Amendments and Additions Necessary for Final Authorization

Groundwater Protection

EPA has identified two issues in its review of the Department's groundwater protection regulations and has indicated that regulatory changes are needed in order to ensure that Massachusetts receives final authorization of its hazardous waste program.

The first issue involves what happens when pollutants are detected in groundwater. Both the Department's and EPA's regulations require certain facilities to conduct detection monitoring programs and compliance monitoring programs under certain circumstances. Both the Department's and EPA's regulations say that if, in the course conducting a detection monitoring program, a facility owner or operator detects any constituent listed as a hazardous constituent in 310 CMR 30.160, the owner or operator must immediately sample and analyze the groundwater for every hazardous constituent on the list and conduct sampling annually thereafter as part of a compliance monitoring program. The only difference between the Department's and EPA's regulations is that EPA's regulations make no provisions for exceptions while the Department's regulations allow the Department to excuse an owner or operator from sampling and analyzing for a particular hazardous constituent if the owner or operator persuades the Department that such constituent has never been in, or derived from, any waste treated, stored, or disposed of in the regulated unit in question throughout the entire active life of the waste management area in question.

The Department adopted this waiver provision in order to avoid requiring owners or operators to spend considerable sums of money searching for contaminants that have a very low likelihood of being present and to ensure that available resources will be utilized in the most efficient manner. However, since no such waiver provision exists in the EPA regulations, EPA considers that provision to be less stringent than their regulations. Therefore, the Department proposes to amend 310 CMR 30.664(8)(b) and 30.671(6) so that they will be equivalent to the corresponding EPA regulations (40 CFR 264.98(h)(2) and 264.99(f)).

The Department proposes to amend 310 CMR 30.832(4) and 30.833(4) to add a requirement that public notices, draft licenses, and fact sheets be sent to any Federal and State agency, including agencies of any affected state other than Massachusetts, with jurisdiction over fish, shellfish, or wildlife resources, coastal zone management plans, or historic preservation. EPA imposes this requirement pursuant to 40 CFR §124.10(c)(1)(iii) and (e).

The Department also proposes to amend 310 CMR 30.833(4) so that the phrase "as may be practicable", which now applies to the giving of all required notices will apply only to notice provided in the Environmental Monitor.

The Department proposes to amend 310 CMR 30.833(5) to correct typographical errors in the designation of certain divisions of that subsection.

The Department proposes to add a new section, 310 CMR 30.841, to be equivalent to and equally or more stringent than, 40 CFR §270.33. Two points should be emphasized. First, the introductory paragraph would restrict the use of compliance schedules in licenses to those cases where "the Department is persuaded that such action is appropriate to protect public health, safety, and welfare and the environment and that such action is not inconsistent with G.L. c. 21C and 310 CMR 30.000". Second, where EPA's regulations allow the licensee to choose between ceasing activities or coming into compliance, the Department's proposed regulations would give the Department the discretion to overrule the licensee's decision.

The Department proposes to amend 310 CMR 30.860(3) to be equivalent to 40 CFR §270.61 (b)(6) and to clarify that whenever a temporary emergency license authorizes the transport, treatment, use, or storage of hazardous waste, such activity shall be in compliance with all the hazardous waste regulations, except to the extent that the license itself expressly specifies otherwise, because such compliance is determined by the Department to be not possible or not consistent with the emergency situation.

The Department proposes to adopt new provisions, 310 CMR 30.901(5) which would deem a facility to be in noncompliance with financial responsibility requirements if the trustee of its trust fund, its surety company, or its insurance company were to go bankrupt or lose its license to do business. EPA imposes this requirement pursuant to 40 CFR §§264.148(b) and 265.148(b).

II. Policies Being Implemented Immediately

Effective immediately, and until further notice, the Department shall implement the following policies:

1. Any approval already granted and still in effect for the reuse, combustion as a fuel, or recycling of hazardous waste pursuant to 310 CMR 30.355, 30.356, 30.381, 30.382 or 30.383 shall be modified, suspended, or revoked, as necessary or appropriate, so that such approval shall only apply to hazardous waste which is not a sludge and is not listed in 310 CMR 30.130 through 30.136. Such modification, suspension, or revocation shall be subject to G.L. c. 21C, §11.

So as not to jeopardize the granting of interim and final authorization pursuant to RCRA, the Department proposes amending its regulations on this subject, specifically 310 CMR 30.851(2) and 30.853, so that they are equivalent to 40 CFR §124.5 on this subject. It should be noted that these proposed regulations are not intended to give any person a right he does not otherwise have to obtain an adjudicatory hearing in the event he requests modification or revocation of a permit and the Department denies the request. If a person does not have a constitutional or statutory right to obtain an adjudicatory hearing, he will not obtain the right pursuant to these proposed regulations.

Explosive wastes

The existing hazardous waste regulations contain two exclusions not found in the Federal regulations. The following wastes are not subject to existing Massachusetts hazardous waste regulations:

- 1) Explosives which are disposed of, or whose disposal is supervised, by U.S. Army Explosive Ordinance Disposal Personnel; and
- 2) Explosives regulated by the Department of Public Safety pursuant to M.G.L. c. 148, s. 9 and regulations codified at 527 CMR 13.00 et seq.

The Department had excluded these materials from regulation on grounds that they were adequately regulated by another governmental agency. Authority for such an exclusion can be found in M.G.L. c. 21C. However, in order for Massachusetts to obtain final authorization for its hazardous waste program, it must regulate a universe of waste which is identical to the Federal program. Therefore, the Department is proposing to delete these exclusions from the Massachusetts regulations.

For the transportation of such waste, the Department is proposing to require that only those standards required by EPA be complied with by the transporter. Therefore, the Department is proposing that such transporters need not obtain a license from the Department. The Department seeks comment on the extent of regulation which is proposed.

Other Proposed Amendments

EPA's regulations, specifically 40 CFR §264.119, require that the owner or operator of a facility for the disposal of hazardous waste on land must file in three places a survey plat indicating the location and dimensions of landfill cells or other disposal areas. The three places are (1) in the deed to property, (2) with the permitting agency (EPA in the case of the Federal government), and (3) with the "local zoning authority". The Department's regulations, specifically 310 CMR 30.595, cover the first two but not the third. The Department now proposes to amend 310 CMR 30.595 to cover the third as well. The Department proposes the local Board of Health be the local agency with whom the survey plat must be filed. The Department makes this proposal for two reasons. First, these facilities are required by G.L. c 111, §150B to have a site assignment from the local Board of Health. That statute says that site assignments are subject to local zoning requirements. Therefore, while the local Board of Health may not be the first local agency to decide the status of such facilities, it will be the last. Second, the Department believes that local Boards of Health are well equipped to utilize the information which must be submitted.

III Explanation of Proposed Regulations Not Necessary For Authorization

In addition to proposed regulatory changes that are needed to ensure that Massachusetts receives both interim and final authorization, the Department is proposing several additional amendments to further strengthen or clarify the regulations. The Department has continued to work closely with the Hazardous Waste Advisory Committee in the continued development of regulations in such areas as financial responsibility, incineration, storage and treatment, and the identification and listing of wastes as hazardous. Some of the proposed regulatory changes, such as those governing financial responsibility would make the regulations more stringent. Other proposed changes would put in regulatory form policies which have been adopted by the Department, such as those governing the regulation of insignificant wastes. Other proposed amendments serve to clarify the regulations or remove certain inconsistencies. The Department seeks comment on each of the proposed changes discussed below:

Amendment to Notification Requirements

The Department is proposing to delete 310 CMR 30.061(3) because it is somewhat misleading. This subsection states that transporters need not submit a separate EPA notification form for hazardous waste activities because the license application to the Department will fulfill the notification requirements. However, the Department has always required that a transporter submit the prescribed notification form as part of the license application. Since the information provided on the notification form is important to the overall evaluation of the applicant's license application and because it has historically been required by the Department, the Department is proposing to delete the provision in the regulations which states that the notification form need not be submitted.

Certification of Closure

The existing regulations (310 CMR 30.586(2)) state that closure shall not be considered complete until so certified by the Department. However, the existing regulations do not contain a corresponding provision for facilities that close under interim status. Therefore, the Department is proposing to amend 310 CMR 30.099(6)(b) to make this standard applicable to all facilities, including those which close before obtaining a license from the Department.

Labelling of Tanks and Containers for Interim Status Facilities

The existing regulations require that generators who accumulate hazardous waste and licensed facilities that store or treat hazardous waste in tanks or containers properly label and mark each container or tank in a manner which:

- (a) identifies the hazardous waste being stored or treated in the tank or container; and
- (b) identifies the hazard(s) associated with the waste.

2. No waiver shall be granted pursuant to 310 CMR 30.664(8)(b) or 310 CMR 30.671(6).
3. In no case shall the duration of any compliance period prescribed pursuant to 310 CMR 30.670 be less than the duration of the active life of the waste management area, including, without limitation the period prior to licensing and the closure period.
4. Within thirty (30) days of receiving a survey plat pursuant to 310 CMR 30.595, the Department shall transmit a copy thereof to the local Board of Health (unless the Board of Health has already received a copy from the owner or operator of the facility).
5. In implementing 310 CMR 30.833(4), the Department shall apply the phase "as may be practicable" only to the mailing of notice to the Environmental Monitor, and not to the giving of any other notice pursuant to said regulation.
6. In implementing the public participation requirements of 310 CMR 30.800, the Department shall implement the requirements set forth in 40 CFR §124.10(10)(c)(1)(iii) and (e).
7. Whenever the Department writes a compliance schedule into a license, it shall do so on terms no less stringent than those set forth in 40 CFR §270/33.
8. Any plan approvals granted by the Department, pursuant to 310 CMR 7.08(4), shall require that hazardous waste incinerators and associated equipment be visually inspected at least daily for leaks, spills, fugitive emissions, and signs of tampering, and that all monitoring and inspection data shall be recorded and the records placed in the facility's operating log.

- (2) The paint is formulated with any ingredient which contains one percent or more by weight of hazardous constituents listed in 310 CMR 30.160.

This listing represents a different approach to identifying a waste as hazardous than has been used in the past. The generator is being required to make a determination of whether or not a waste is hazardous by reviewing the ingredients which are used to produce a product. It is being assumed that use of hazardous constituents in the manufacturing process will result in the presence of these constituents in the waste which is produced. This approach eliminates the need for a generator to analyze his waste for the presence of each hazardous constituent. Provided that a waste does not fail a test for a characteristic of hazardous waste, a generator can also declare that his waste is non-hazardous simply by having knowledge of what constituents are used in the manufacturing process. The Department seeks comment on the suitability of this approach for listing a waste as hazardous. Might such an approach be used for other industrial processes?

The listing is comprised of two parts. The first part states that any hazardous constituent used as an ingredient in paint formulation will cause the waste produced to be deemed hazardous, no matter what the concentration of the constituent is in the paint formula. A constituent is considered an ingredient if the constituent comprises 100% of the ingredient. The second part of the listing covers those constituents which are not in themselves ingredients used in paint manufacturing but comprise a fraction of an ingredient which is used. If the fraction is one-percent or more by weight, the waste produced in the manufacture of the paint is hazardous. The one-percent limit is consistent with the Massachusetts "Right-To-Know" law (Section 4 of Chapter 470) which qualifies a one-percent mixture for inclusion on the substances list. Paint manufacturers are already required to determine if they use products which contain one-percent or more of toxic substances. A paint manufacturer should not find it too difficult, therefore, to determine whether his waste is hazardous under this proposed regulation. The Department invites comment on the use of percentages to determine if a waste is hazardous.

The Department also seeks comment on the need to define the term "paint". The Department intends the term "paint" to include such substances as shellac, varnish, stains, laquers, latex, enamel, alkyds and urethanes. Is the term "surface coating" more appropriate?

Applicability of the Interim Provisions for Waste Oil

In 310 CMR 30.200 of the existing hazardous waste regulations, the Department adopted special provisions for those who generate only waste oil (e.g., service stations). In the applicability section of these regulations, it is stated that such generators are subject to the provisions of 310 CMR 30.200 and not to the provisions of 310 CMR 30.300 (Requirements for Generators of Hazardous Waste). It is important to note that included in the provisions of 30.300 are regulations governing reuse, combustion as a fuel, and recycling of hazardous waste. Therefore,

Currently, no such standard exists for owners or operators of interim status facilities. This was not intended by the Department. Therefore, the Department is proposing to amend 310 CMR 30.099 to make this standard applicable to owners and operators of interim status facilities.

Standards For Underground Tanks

The existing regulations included a requirement that generators who accumulate hazardous waste in underground tanks test such tanks for leakage by April 16, 1984. In addition, generators were required to implement inventory control programs for these tanks. Owners or operators of hazardous waste facilities are required by the existing regulations to submit the results of leakage tests for tanks with the license application. In addition, upon being granted a license, owners or operators are required to implement inventory control programs for waste stored in underground tanks.

The Department now recognizes that there exists an undesirable discrepancy in the manner that facility owners or operators are regulated with respect to underground tanks as compared to generators who utilize underground tanks. Because it may be several years before the Department requests that a particular facility owner or operator submit to the Department a license application, owners or operators of facilities with interim status are currently excluded from the tank testing and inventory control requirements. A standard for facility owners and operators which is less stringent than that required for generators does not appear to be justifiable. Therefore, the Department is proposing to amend 310 CMR 30.099(6)(d) to require that owners or operators of interim status facilities, by December 31, 1984, test their underground tanks and implement inventory control programs in the same manner than generators must.

Listing of Wastes from Paint Manufacturing

Currently, wastes which are generated in the course of paint manufacturing are not specifically listed as hazardous waste. However, many such wastes must be managed as hazardous because they exhibit one or more characteristics of hazardous waste, generally the characteristics of ignitability or EP toxicity. However, the Department is concerned that certain paint wastes may contain hazardous constituents (e.g., methyl methacrylate) which are not subject to testing using the EP toxicity procedure. Therefore, the Department is proposing a listing that will take into consideration each hazardous constituent which is listed in 310 CMR 30.160. The proposed listing reads as follows:

M004 - Waste generated in the manufacture of paint which is not otherwise regulated as hazardous waste pursuant to 310 CMR 30.120 (characteristics of hazardous waste) if:

- (1) The paint is formulated with one or more ingredients which are listed as hazardous constituents in 310 CMR 30.160; or

- (1) a more accurate test be made;
- (2) the tank be repaired; or
- (3) the tank be removed from service.

As proposed, all new underground tanks used for the accumulation of waste oil must be constructed of a non-corrosive material or of steel provided with some suitable form of cathodic protection. Monthly and annual liquid level measurement tests must also be conducted for new tanks unless they are provided with some form of secondary containment system.

The Department seeks comment on all aspects of this proposed leak-detection program and whether there may be alternative programs that are both workable and effective.

Generator Change of Status

It is important for the Department to keep its records up-to-date regarding who is generating hazardous waste in Massachusetts. If a generator ceases to generate hazardous waste, the Department implements a procedure whereby the generator's status as a generator is terminated. However, some generators who have moved from a particular site or who have otherwise ceased generating hazardous waste have not notified the Department. Therefore, the Department is proposing an amendment to 310 CMR 30.303 which would require that a generator who ceases generating hazardous waste submit a change of status request to the Department and follow procedures implemented by the Department to terminate the generator's status as a generator of hazardous waste.

Management of Insignificant Waste

In January 1983, the Department developed a policy pertaining to the implementation of the regulations for insignificant wastes as found in 310 CMR 30.353. Insignificant quantities of hazardous waste, as defined in the regulations are not subject to the hazardous waste regulations provided they are managed safely and in compliance with all applicable laws and regulations.

The existing Department policy establishes guidelines whereby such insignificant waste, may no longer be managed as insignificant waste whenever one of the following conditions exists:

- (1) A transporter accepts insignificant quantities of waste from more than one generator of insignificant waste such that the total amount accepted from all generators exceeds the insignificant quantities established in the regulations. The existing policy requires that the transporter who engages in such practices must be licensed by the Department and comply with the provisions of 310 CMR 30.000.

as currently written, these regulations do not apply to the reuse, combustion as a fuel, or recycling of waste oil. With regard to these activities, the Department sees no reason to exclude waste oil from these scenarios. In fact, this exclusion was never intended by the Department when drafting the regulations. Generators and reusers and recyclers of waste oil should not be denied the opportunity to participate in such reuse/recycling arrangements, subject to Departmental approval.

310 CMR 30.202(9) states that waste oil shall be delivered by transporters only to "locations authorized by the Department". Without an approval process for persons who wish to reuse or recycle waste oil received from off-site such as the approval processes specified in 310 CMR 30.355, 30.356, 30.381 and 30.382, a transporter cannot currently deliver waste oil to such a site and be in compliance with existing regulations. Therefore, the Department is proposing an amendment which specifically states that 310 CMR 30.355, 30.356, 30.381 and 30.382 apply to generators who are subject to the "Interim Provisions for Waste Oil". This proposed amendment has the effect of establishing the criteria whereby the Department may authorize locations for the reuse, combustion and recycling of waste oil.

The Department is not proposing to apply the standards of 310 CMR 30.383 (for those whose hazardous waste can be recycled by the generator at the site of generation) to the on-site recycling of waste oil. Such processes are adequately covered by the existing regulation 310 CMR 30.202(10) which states that "Any process at the site of generation of waste oil which separates waste oil generated at that site from non-hazardous wastes does not constitute treatment as defined in 310 CMR 30.010". The regulation also sets a performance standard for the utilization of such processes.

Accumulation of Waste Oil in Underground Tanks

The Department is not proposing final waste oil regulations in this Public Hearing Draft. Therefore, 310 CMR 30.200 "Interim Provisions for Waste Oil" will remain in effect. However, the Department is proposing an amendment to this section which will require persons subject to these provisions to test periodically for leakage any underground tank in which waste oil is accumulated. In addition, standards have been included for the design of new underground tanks.

As proposed, underground tanks must be tested on a monthly basis by sealing the tank off for 24 hours and by taking measurements of the liquid level before and at the end of this period. If the difference in the two measurements is more than 1/2 inch, the owner or operator must notify the Department and the local fire department. The Department is also proposing that, on an annual basis, the tank be sealed off for 48 hours and measurements be taken. Once the Department is notified of a set of measurements which indicates a leak, the Department could then require that:

The other wording inconsistency is minor in nature and for the purposes of 310 CMR 30.000, does not lead to any difference in the way that 30.355 and 30.356 are implemented. Under 30.355(5), the material is decertified as a Waste". Under 30.356(4), the material is decertified as a "hazardous waste". The practical effect of this inconsistency is nil but a regulatory correction is being proposed in order to avoid confusion.

The Department has also become aware that there is an element missing in the regulations of 30.382. The regulations require that the financial responsibility requirements of 30.900 be complied with but no mention is made of the need for a closure plan as detailed in 30.580. Without submission of a closure plan, the Department could not properly evaluate the closure cost estimate as required by 30.901(2)(d)1. Therefore, a regulatory amendment that specifically states that a closure plan is required is being proposed. Until the time the amendment goes into effect, however, the Department may still require the submission of such a plan in all cases, prior to granting an approval, in order to ensure that the owner or operator has successfully met the requirements of 30.903. In fact, the requirements of 30.903, Cost Estimation For Closure cannot be met without the existence of a closure plan so the Department is not in fact requiring anything more of the applicant than is practically required by the regulations as currently written.

On October 15, 1983, regulations (310 CMR 30.383) went into effect which establish an approval process for generators who conduct recycling at the site of generation in a manner which does not qualify as "treatment which is an integral part of the manufacturing process". Prior to this time, no approval process was required for such operations. Therefore, the regulations should have included a deadline for generators already conducting such recycling activities to submit an application to the Department. No such deadline was included so the Department is now proposing to require that generators conducting such operations submit an application no later than December 31, 1984.

Wastewater Treatment Unit Annual Reports

310 CMR 30.605(2)(i) currently specifies that owners or operators of wastewater treatment units submit annual reports to the Department. However, the section which is referenced (310 CMR 30.544) states that annual reports are required of licensed hazardous waste facilities. Because wastewater treatment units are not licensed by the Department, these two regulatory provisions contradict one another as currently written. Therefore, 310 CMR 30.544 is being amended to clarify that the annual reporting requirement applies to both licensed facilities and wastewater treatment units.

Applicability of Wastewater Treatment Unit Operations

As indicated in the applicability section of the "Special Requirements For Wastewater Treatment Units" (310 CMR 30.605(1)), the accumulation, storage or treatment in a wastewater treatment unit which is permitted pursuant to G.L. c. 21, S.43 is not subject to G.L. c. 21C and the regulations promulgated thereunder (310 CMR 30.605). Such units which have NPDES or equivalent state permits are not exempt from hazardous waste regulations however. They are subject to hazardous waste regulations promulgated under G.L. c. 21, S.43, in particular, 314 CMR 8.05. Because the Department is aware that some owners or operators of wastewater treatment units may not be aware of this fact, the Department is proposing to add a clarifying amendment which refers such owners and operators to 314 CMR 8.05. This amendment to 310 CMR 30.605(1)(c) does nothing to alter the current content of the regulations but only clarifies that which is already in effect.

- (2) A generator of hazardous waste who receives an insignificant quantity of hazardous waste from a person must manage those wastes in compliance with 310 CMR 30.000.
- (3) A person who receives insignificant quantities of hazardous waste from more than one generator of insignificant waste becomes a generator of hazardous waste when the total amount accumulated at any one time exceeds the insignificant quantities established in the regulations.

The Department is also proposing to clarify the insignificant waste provisions as they pertain to waste oil. The existing regulations contain "Interim Provisions for Waste Oil" that apply to those who generate only waste oil. The Department intended that these provisions apply to establishments such as automobile service stations and marinas. The Department recognizes that many such establishments will typically also generate insignificant quantities of other wastes such as solvents. The Department is therefore proposing a clarifying amendment which states that a generator is considered to be a generator of only waste oil, even though he may, in addition to waste oil, generate insignificant quantities of other hazardous wastes.

The Department seeks comment on each of these proposed amendments pertaining to insignificant wastes.

Amendments to the reuse/recycling regulations

The Department has become aware that there are two wording inconsistencies between the regulations of 310 CMR 30.355 (reuse) and those of 310 CMR 30.356 (combustion as a fuel). The regulatory exemptions provided under the reuse scenario are essentially the same as those provided under the regulations regarding the combustion of hazardous waste as a fuel by the generator of the waste. However, the wording inconsistencies confuse this fact. Therefore, the Department is proposing the following amendments:

Under 30.355(4) for reuse, it is stated that the material to be reused is no longer subject to 310 CMR 30.000 (hazardous waste regulations) if reused in accordance with the approval. Under 30.356(3) for combustion, it is stated that the material is no longer subject to 310 CMR 30.300 (generator requirements) if combusted in accordance with the approval. This seems to imply that all other requirements (including licensing of storage activities) still apply. However, this was not intended to be the case, since the approval will contain a certification by the Department that the material combusted pursuant to that approval is no longer a waste. Since the material is decertified as a hazardous waste, it follows that it is no longer subject to 310 CMR 30.000 but would only be subject to 30.356 and the conditions of the approval. Therefore, the regulatory language of each of the sections (30.355 and 30.356) leads to the same result, although this difference in language was not intended and will be corrected by the proposed amendment. The amendment states that the material is no longer subject to 310 CMR 30.000, provided that the material is combusted in compliance with the terms of the approval.

- (1) A facility has been certified as closed by the Department. All wastes and waste residues have been removed in compliance with the closure plan so that no post-closure care is needed. A few years after closure it is discovered that the facility may have affected the health of the neighboring community or caused property damage (e.g., contaminated wells). If this occurs, damaged parties cannot recover damages on the owners or operators expired insurance policy. This is because insurance coverage is provided on a claims-made basis. Although the damage occurred while the insurance was in effect, the damage was not discovered until after the owner or operator's insurance coverage expired. Therefore, claims cannot be made against this policy and the owner or operator has no insurance coverage for the event(s) which caused the harm. In short, damage which is discovered after closure or any claim which is filed after closure is not covered by liability insurance.
- (2) A facility has been certified as closed by the Department. Some waste will remain at the site after closure, so the owner or operator must provide for post-closure care in compliance with a post-closure plan. A few years after closure hazardous constituents escape into the environment and cause harm to third parties. Because, no insurance coverage is required after closure, even if waste will remain in place after closure, the owner or operator has no protection for claims made against the facility.

The Department is proposing that owners or operators of all facilities continue to demonstrate financial responsibility for bodily injury and property damage for five years after the facility is closed. For this five-year period, owners or operators would be insured for claims made against the facility for events such as those described above. Five year coverage is being proposed because:

- (1) The Department is confident that a market for such insurance will be available for a five year period but is uncertain that insurance companies will offer coverage to facilities for any period of time beyond this;
- (2) Financial assurances may be available five years after closure and beyond through the EPA's Post-Closure Maintenance Trust Fund established under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); and
- (3) With regard to facilities which do not leave any waste on-site after closure, the need for such coverage is likely to decrease with time, as the probability of claims being made decreases.

Signing of Final Licenses

The existing regulations require that all license applications be signed by both the owner or operator. The regulations do not specify that the final license which is issued by the Department be signed by both the owner and operator. Since the final license which is granted might vary significantly from the original application, and since both the owner and operator should be held accountable to the conditions of a license issued by the Department, the Department is proposing to amend 310 CMR 30.807 to require that all final licenses be signed by the owner and the operator.

Amendments to Financial Responsibility Regulations

Continuous Liability Insurance Coverage

The current regulations (310 CMR 30.908) require that owners or operators of all facilities have in effect liability coverage for sudden accidental occurrences and that owners or operators of certain facilities (e.g., incinerators) have in effect liability coverage for non-sudden accidental occurrences. The Department is proposing an amendment that should eliminate the potential for an undesirable gap in the time period of such coverage.

An owner or operator may, at some future time, choose to change insurance policies or insurance companies. It is in the best interest of both the public and the insured that the new policy provide coverage for at least the same period of time that the original policy did. For example, assume an owner or operator purchased an insurance policy on February 13, 1984 which provides coverage for all acts which occurred on or after February 13, 1983. Five years from now the owner or operator decides to change insurance companies. Without the regulatory amendment being proposed herein, the insurance company could sell the facility a policy which does not provide coverage for acts which may have occurred during each of the previous five years. Considering that there might often be several years delay between the time at which an incident occurs (e.g., groundwater contamination) and the time at which property damage or bodily injury becomes known, such a gap in coverage could have serious consequences for both the injured party and the insured. Therefore, the Department is proposing an amendment which will require that assurances of financial responsibility for bodily injury and property damage, if renewed under a different instrument, company or policy, must cover all acts occurring during the period covered by the original policy, company or instrument.

Financial Responsibility Assurances For Bodily Injury and Property Damage Discovered or Caused After Closure

Under the existing regulations, owners or operators of facilities must provide liability coverage for both sudden and non-sudden accidental occurrences until such time that the Department certifies that the facility is closed. There is no requirement that owners or operators obtain insurance after this point in time. Therefore, there are at least two possible circumstances for which insurance coverage may be appropriate for facilities which have closed:

Financial Responsibility Assurances For Clean-Up at Closure or during the Post-Closure period

The existing regulations require that the owner or operator establish and maintain financial assurances for planned events such as closure of the facility and post-closure care. Financial mechanisms such as closure trust funds, surety bonds, letters of credit and insurance must be used to ensure adequate funds for this purpose. The planned activities which will take place at closure and during the post-closure care period are detailed in the closure and post-closure plans and cost estimates are based on these plans.

The Department is proposing to amend the regulations to clarify that the funds which are set aside for planned events during closure may be used, when required by the Department, to take remedial actions at a site as part of the closure process. Such remedial actions, such as site assessment, removal of contaminated soils and clean-up of groundwater may not be a part of the specific closure plan, but such actions may be necessary at closure. It may be appropriate to utilize funds set aside for other purposes (planned closure activities) to ensure that effective and expedient remedial actions are taken as part of the closure process.

The Department is also proposing to amend the regulations to clarify that funds which are set aside for planned events during the post-closure period may be used, when required by the Department, to take remedial actions at a site during the post-closure period. Post-closure funds would typically be set aside for such planned events such as maintaining a cap at a landfill or conducting groundwater monitoring. However, as proposed, in the event of a contamination incident during the post-closure period, funds previously dedicated for other purposes could be used to take remedial action.

The Department seeks comment on these proposed amendments.

The Department is not, at this time, proposing a regulatory amendment which would ensure that the owner or operator has set aside funds dedicated to the taking of remedial action during the operating period of the facility. Currently, both state and federal Superfunds are available to provide coverage for such events. Should additional financial guarantees be required of the owner or operator? If so, how might this be accomplished?

Institutions with Authority to Act as Trustee or Issue Letters of Credit

The existing regulations state that an institution's trust operations or letter-of-credit operations must be regulated by the Massachusetts Commissioner of Banking in order for the institution to be eligible to act as a trustee or issue letters of credit to an owner or operator seeking to comply with the financial assurance requirements for closure and post-closure care. The Department believes that national banks not regulated by the Massachusetts Commissioner of Banking should also be considered acceptable institutions to issue letters of credit or act as a trustee for these purposes. Accordingly, the Department is proposing an amendment which would authorize national banks to engage in such activities in the Commonwealth.

The Department seeks comment on several aspects of this proposal:

- (1) Should such coverage be required only for facilities at which waste will remain after closure?
- (2) A major reason for requiring liability coverage after closure is that there may sometimes be a considerable delay between the occurrence of an event and the discovery of harm. Therefore, a significant period of time may elapse between the event and the filing of a claim against the insured. This is primarily the case with regard to non-sudden accidental events. Therefore, is it appropriate to require only that owners or operators provide insurance after closure for non-sudden occurrences?
- (3) Is a five year period of coverage appropriate?
- (4) M.G.L. c. 21E, the "Massachusetts Oil and Hazardous Material Release Prevention and Response Act", established a special commission, the purpose of which is to make "an investigation and study relative to determining the adequacy of existing common law and statutory remedies available to the commonwealth to recover its cost of assessing, containing and removing oil and hazardous materials released or threatened to be released into the environment and to any other person for damage, injury, loss or other harm suffered as a result of such release of oil or hazardous material." Should the Department await the results of the deliberations of this commission before promulgating any further regulations regarding liability insurance?

The Department also seeks comment on a related matter. Although the Department is proposing to require that facility owners or operators obtain liability insurance after closure, the Department has not proposed any mechanism to ensure that adequate funds for such insurance will be available at closure. Should such assurance be required? How might this be accomplished? Might it be appropriate to require that owners or operators estimate the cost of insurance, update this estimate annually, and set aside funds throughout the facility's operating life with the use of a trust fund or other financial mechanism. Such an approach would help ensure that adequate funds are available after closure for insurance, much in the same manner that funds are set aside to ensure proper closure or post-closure care of a facility. Are other means of ensuring adequate funding available?

Financial Responsibility Assurances For Clean-Up at Closure or during the Post-Closure period

The existing regulations require that the owner or operator establish and maintain financial assurances for planned events such as closure of the facility and post-closure care. Financial mechanisms such as closure trust funds, surety bonds, letters of credit and insurance must be used to ensure adequate funds for this purpose. The planned activities which will take place at closure and during the post-closure care period are detailed in the closure and post-closure plans and cost estimates are based on these plans.

The Department is proposing to amend the regulations to clarify that the funds which are set aside for planned events during closure may be used, when required by the Department, to take remedial actions at a site as part of the closure process. Such remedial actions, such as site assessment, removal of contaminated soils and clean-up of groundwater may not be a part of the specific closure plan, but such actions may be necessary at closure. It may be appropriate to utilize funds set aside for other purposes (planned closure activities) to ensure that effective and expedient remedial actions are taken as part of the closure process.

The Department is also proposing to amend the regulations to clarify that funds which are set aside for planned events during the post-closure period may be used, when required by the Department, to take remedial actions at a site during the post-closure period. Post-closure funds would typically be set aside for such planned events such as maintaining a cap at a landfill or conducting groundwater monitoring. However, as proposed, in the event of a contamination incident during the post-closure period, funds previously dedicated for other purposes could be used to take remedial action.

The Department seeks comment on these proposed amendments.

The Department is not, at this time, proposing a regulatory amendment which would ensure that the owner or operator has set aside funds dedicated to the taking of remedial action during the operating period of the facility. Currently, both state and federal Superfunds are available to provide coverage for such events. Should additional financial guarantees be required of the owner or operator? If so, how might this be accomplished?

Institutions with Authority to Act as Trustee or Issue Letters of Credit

The existing regulations state that an institution's trust operations or letter-of-credit operations must be regulated by the Massachusetts Commissioner of Banking in order for the institution to be eligible to act as a trustee or issue letters of credit to an owner or operator seeking to comply with the financial assurance requirements for closure and post-closure care. The Department believes that national banks not regulated by the Massachusetts Commissioner of Banking should also be considered acceptable institutions to issue letters of credit or act as a trustee for these purposes. Accordingly, the Department is proposing an amendment which would authorize national banks to engage in such activities in the Commonwealth.

EMERGENCY REGULATIONS

The following regulations were promulgated as emergency regulations on March 15, 1984. The Department is proposing to make these regulations permanent.

1. 310 CMR 30.064 is hereby amended by striking out the phrase "40 CFR Part 122" wherever said phrase appears in said section and inserting in place thereof, in each case, the phrase:- 40 CFR Part 270, as in effect on July 1, 1983.

2. 310 CMR 30.099 is hereby amended by striking out the phrase "40 CFR Part 122" wherever said phrase appears in said section and inserting in place thereof, in each case, the phrase:- 40 CFR Part 270, as in effect on July 1, 1983.

3. 310 CMR 30.099(6) is hereby amended by striking out the second sentence of the introductory paragraph and inserting in place thereof the following sentences:- Until a final license decision takes effect pursuant to 310 CMR 30.838, such facility shall at all times comply with 310 CMR 30.510 through 30.579 and 30.900, provided that a surety bond guaranteeing performance of closure shall not be acceptable for the purpose of complying with 310 CMR 30.904 and that a surety bond guaranteeing performance of post-closure care shall not be acceptable for the purpose of complying with 310 CMR 30.906. Until a final license decision takes effect pursuant to 310 CMR 30.838, such facility shall at all times comply with the following requirements of 40 CFR Part 265, as in effect on January 26, 1983, as applicable to the specific type of facility, provided that the term "Department" shall be substituted for the term "Regional Administrator" wherever the latter term appears:.

4. 310 CMR 30.099(6)(b) is hereby amended by striking out said division and inserting in place thereof the following division:-

(b) Subpart G (Closure and Post-Closure), provided that:

1. in implementing 40 CFR Section 265.112(d), the Department shall approve, modify, or disapprove a proposed closure plan within a reasonable time after its receipt by the Department;

2. in implementing 40 CFR Section 265.118(d), the Department shall approve, modify, or disapprove a proposed post-closure plan within a reasonable time after its receipt by the Department;

3. in implementing 40 CFR Section 265.118(d), the Department shall act in accordance with the requirements and procedures set forth in 310 CMR 30.833, 30.835, 30.836, 30.837, and 30.839;

4. in implementing 40 CFR Section 265.118(e) and (f), the Department shall determine whether a proposed modification of a post-closure plan is major or minor, using the criteria set forth in 310 CMR 30.851 and 30.852, and if the proposed modification is major, the Department shall act in accordance with the requirements and procedures set forth in 310 CMR 30.833,

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- 30.835, 30.836, 30.837, and 30.839; and
5. except as provided in 310 CMR 30.890, denial of a request to modify a post-closure plan shall not be subject to public notice, public comment, or public hearings.

310 CMR 30.099 is hereby further amended by inserting after subsection (9) following subsections:-

- (10) Ownership or operational control of a facility having interim status pursuant to RCRA shall not be transferred from one person to another until at least ninety (90) days after a revised Part A permit application is submitted to the EPA and to the Department. If the facility is licensed pursuant to 310 CMR 30.800, the provisions of 310 CMR 30.828 shall apply.
- (11) The owner or operator of a facility having interim status pursuant to RCRA shall notify the Department by certified mail of the commencement of a voluntary or involuntary proceeding pursuant to Title 11 (Bankruptcy) of the United States Code in which the owner or operator is named as a debtor within ten (10) days after commencement of the proceeding.
- (12) 310 CMR 30.143 (2) shall be effective on and after July 1, 1985. Until July 1, 1985, hazardous waste is not subject to 310 CMR 30.143(1)(b) through (h) if it meets all the following requirements:
- (a) it is not a sludge; and
 - (b) it is not listed in 310 CMR 30.130 through 30.136 and does not contain one or more hazardous wastes listed in 310 CMR 30.130 through 30.136, except that this provision shall not apply to waste oil (M001); and
 - (c) it is either:
 - 1. reused in compliance with 310 CMR 30.355; or
 - 2. combusted as a fuel in compliance with 310 CMR 30.356; or
 - 3. recycled in compliance with 310 CMR 30.381, 30.382, or 30.383.

310 CMR 30.125 is hereby amended by inserting after subsection (2) the following subsections:-

- (3) Waste which is hazardous waste solely because it has the characteristic of EP toxicity because chromium is present, and not because any other material is present, and not for any other reason, shall not be subject to 310 CMR 30.000 if the generator of the waste persuades the Department by petitioning, pursuant to 310 CMR 30.142(2), (3) and (5), that:
- (a) The chromium in the waste is exclusively, or nearly exclusively, trivalent chromium; and

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- (b) The waste is generated from an industrial process which uses trivalent chromium exclusively, or nearly exclusively, and the process does not generate hexavalent chromium; and
- (c) The waste is typically and frequently managed in non-oxidizing environments.

(4) Specific wastes which meet the standard in 310 CMR 30.125(3(a), (b) and (c), provided they do not fail the test for the characteristic of EP toxicity, and are not otherwise hazardous waste, are:

(a) Chrome (blue) trimmings generated by the following sub-categories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue and shearling.

(b) Chrome (blue) shavings generated by the following sub-categories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.

(c) Buffing dust generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue.

(d) Sewer screenings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.

(e) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.

(f) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; and through-the-blue.

(g) Waste scrap leather from the leather tanning industry, the shoe manufacturing industry, and other leather product manufacturing industries.

(h) Wastewater treatment sludges from the production of TiO_2 pigment using chromium-bearing ores by the chloride process.

7. Table 30.125 in 310 CMR 30.125 is hereby amended by striking out, in line D007, after the word "chromium", the words:- "in the hexavalent form, Cr^{+6} ".

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8. 310 CMR 30.155(3)(a) is hereby amended by inserting after the word "cadmium," the word:- chromium,.

9. 310 CMR 30.155(3)(b) is hereby amended by striking out said division and inserting in place thereof the following:-

(b) For all analyses, the methods of standard addition shall be used for quantification of species concentration.

10. 310 CMR 30.592(1) is hereby amended by striking out the first sentence and inserting in place thereof the following sentence:- Post-closure care in compliance with 310 CMR 30.000 shall continue for 30 years after the date of completing closure.

11. 310 CMR 30.593(3) is hereby amended by striking out the second sentence and inserting in place thereof the following sentence:- The Department shall determine whether a proposed amendment of a facility's post-closure plan is major or minor, using the criteria set forth in 310 CMR 30.851 and 30.852, and if the proposed amendment is major, the Department shall act in accordance with the requirements and procedures set forth in 310 CMR 30.833, 30.835, 30.836, 30.837, and 30.839

12. 310 CMR 30.807(1)(a) is hereby amended by striking out said division and inserting in place thereof the following division:-

(a) If the applicant is a corporation, by an individual who is a responsible corporate officer of the corporation and who is authorized by the corporation, in accordance with corporate procedures, to sign such documents on behalf of the corporation. The corporate seal shall be included. As used in this section, the term "responsible corporate officer" shall mean a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making or decision-making functions for the corporation.

13. 310 CMR 30.822 is hereby amended by inserting after subsection (9) the following subsection:-

10) Notification of Bankruptcy. The licensee shall notify the Department by certified mail of the commencement of a voluntary or involuntary proceeding pursuant to Title 11 (Bankruptcy) of the United States Code in which the licensee is named as a debtor within ten (10) days after commencement of the proceeding.

ADDITION REGULATIONS NECESSARY FOR AUTHORIZATION

The following regulatory amendments will be necessary to ensure that Massachusetts receives Final Authorization to implement the hazardous waste management program in lieu of the EPA.

1. 310 CMR 30.104 is hereby amended by striking out subsections (15) and (16).
2. 310 CMR 30.104 is hereby further amended by redesignating subsection (17) as subsection (15).
3. 310 CMR 30.104 is hereby amended by inserting after new subsection (6) the following subsection:-
 - (7) 310 CMR 30.401(2), 30.402(1), 30.404, 30.405, 30.406, 30.408, 30.412 and 30.413 shall apply and all other provisions of 310 CMR 30.400 shall not apply to:
 - (a) explosives which are disposed of, or whose disposal is supervised, by U.S. Army Explosive Ordinance Disposal Personnel; and
 - (b) Explosives regulated by the Department of Public Safety pursuant to M.G.L. c. 148, s. 9 and regulations codified at 527 CMR 13.00 et seq.
4. 310 CMR 30.595 is hereby amended by striking out the first sentence and inserting in place thereof the following:- Within three months after closure is completed, the owner or operator of a land disposal facility shall record in the appropriate Registry of Deeds or, if the land in question is registered land, in the registry section of the land court for the district wherein the land lies, and shall submit to the Department and to the Board of Health of the city or town wherein the land lies, a survey plat indicating the location and dimensions of landfill cells or other disposal areas with respect to permanently surveyed benchmarks.
5. 310 CMR 30.617(4)(d) is hereby amended by inserting at the end thereof the following:- , and comply with all the other requirements set forth in 310 CMR 30.612(3).
6. 310 CMR 30.664(8)(b) is hereby amended by striking out said division and inserting in place thereof the following:-
 - (b) Immediately sample and analyze the groundwater in all monitoring wells for the presence in the groundwater of all constituents identified in 310 CMR 30.160 and determine the concentration of all such constituents that are present in the groundwater.

7. 310 CMR 30.670 is hereby amended by striking out said section and inserting in place thereof the following section:-

30.670: Compliance Period

In the facility's license, the Department shall specify the compliance period during which the requirements of 310 CMR 30.665 (Groundwater Protection Standard) shall apply. In no event shall the duration of the compliance period be less than the duration of the active life of the waste management area, including, without limitation, the period prior to licensing, and the closure period. The compliance period shall begin when the owner or operator initiates a compliance monitoring program meeting the requirements of 310 CMR 30.671. If the owner or operator is engaged in a corrective action program, the compliance period shall not end until the owner or operator has persuaded the Department, and the Department has determined in writing, that the requirements of 310 CMR 30.665 have been complied with for a period of at least three consecutive years.

8. 310 CMR 30.671(6) is hereby amended by striking out said subsection and inserting in place thereof the following:-

(6) To determine whether additional hazardous constituents are present in the uppermost aquifer, the owner or operator shall, at least annually, take samples from all monitoring wells at a compliance point and analyze such samples for all constituents identified in 310 CMR 30.160. If the owner or operator finds in the groundwater any constituent which is identified in 310 CMR 30.160 and which is not identified in the facility's license as a hazardous constituent, the owner or operator shall, in writing, report the concentration of each additional constituent to the Department within seven days after completion of the analysis.

9. 310 CMR 30.000 is hereby further amended by inserting the following section:-

30.706: Disposal Into Waterbodies

The disposal of hazardous waste into the ocean, or into any lake or pond, whether naturally occurring or man-made, or into any river, stream, spring, or estuary, or into any land under the ocean or under any lake or pond, whether naturally occurring or man-made, or under any river, stream, spring, or estuary, is prohibited.

10. 310 CMR 30.832(4) is hereby amended by striking out said subsection and inserting in place thereof the following subsection:-

30.832(4): continued

(4) The Department shall send a copy of the draft facility license and of the accompanying fact sheet to the applicant, the local board of health, each person described in 310 CMR 30.833(4)(a)7, and, on request, to any other person.

11. 310 CMR 30.833 is hereby amended by striking out subsections (4) and (5) and inserting in place thereof the following:-

(4) Public notices pursuant to this section shall be given by the following methods;

(a) By mailing notice to:

1. the applicant;
2. EPA, c/o Regional Administrator, Region I;
3. the board of health of the city or town in which the facility is to be located;
4. the Environmental Monitor, to the extent practicable;
5. each city or town having jurisdiction over the area in which the facility is proposed to be located;
6. each State agency having any authority pursuant to State law with respect to the construction and operation of the facility;
7. each Federal and State agency, including agencies of any affected State other than Massachusetts, with jurisdiction over fish, shellfish, or wildlife resources, coastal zone management plans, or historic preservation; and
8. persons on a mailing list developed by the Department.

(b) By publication, paid for by the applicant, in a daily or weekly newspaper of general circulation within the locality affected by the facility.

(c) By broadcasting the notice on radio stations serving the locality affected by the facility.

(5) All public notices issued pursuant to this section shall, at a minimum, contain the following information:

(a) The name and address of the office of the Department processing the license application for which notice is being given;

(b) The name and address of the licensee or applicant and, if different, of the facility which is the subject of the application;

(c) The name, address, and telephone number of an individual from whom interested persons may obtain further information, including a copy of the draft license or application, and the accompanying fact sheet;

(d) A brief description of the required public comment procedures; provided that in the case of a public notice relating

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- to a license modification being proposed pursuant to 310 CMR 30.851, the notice need only describe the proposed modification;
- (e) Any additional information considered necessary or appropriate, including any other procedures by which a person may request a public hearing or otherwise participate in the process leading to the final license decision; and
- (f) A tentative schedule for the decision-making process.

12. 310 CMR 30.000 is hereby amended by inserting after 310 CMR 30.840 the following section:-

30.841: Compliance Schedules in Licenses

When the Department is persuaded that such action is appropriate to protect public health, safety, and welfare and the environment and that such action is not inconsistent with G.L. c. 21C and 310 CMR 30.000, the Department may specify in a license a schedule for the licensee to come into compliance with G.L. c. 21C and 310 CMR 30.000. Each compliance schedule shall be in accordance with the following requirements:

- (1) Compliance shall be required as soon as possible.
- (2) Except as provided in 310 CMR 30.841(3), if the compliance schedule exceeds one year from the date of issuance of the license, the schedule shall include interim requirements and interim dates for their achievement. In no event shall the time between any two interim dates exceed one year. If the time for completion of any interim requirement is more than one year and is not readily divisible into stages for completion, the license shall specify interim dates for the submission of reports of progress toward completion of the interim requirements and indicate a projected completion date. Within fourteen (14) days after each interim date and the final date of compliance, the licensee shall notify the Department in writing of its compliance or non-compliance with the interim or final requirements, as the case may be.
- (3) The compliance schedule may provide for cessation of activities authorized by the license.
 - (a) If the Department decides that activities authorized by the license shall cease on or before the expiration date of the license, the license shall be issued or modified as appropriate to include a compliance schedule leading to timely cessation of such activities. If a license was issued with a compliance schedule,

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the licensee shall cease such activities before noncompliance with any interim or final requirement specified in such compliance schedule.

(b) If the Department decides to allow the licensee to choose between ceasing activities authorized by the license and engaging in such activities in compliance with a compliance schedule, the license shall be issued or modified as appropriate to include two schedules as follows:

1. Both schedules shall contain an identical interim deadline requiring the licensee to make a final decision on whether to cease conducting activities authorized by the license. The license shall require the licensee to make this decision by a date established by the Department, which date shall be no later than that necessary to ensure sufficient time for the licensee to comply with applicable requirements in a timely manner if the licensee's decision is to continue engaging in activities authorized by the license.

2. One schedule shall lead to engaging in activities authorized by the license in timely compliance with applicable requirements. If the licensee makes a final decision to continue engaging in such activities, the licensee shall follow this schedule.

3. The second schedule shall lead to cessation of activities authorized by the license by a date which shall ensure timely compliance with applicable requirements. If the licensee makes a final decision to cease engaging in such activities, the licensee shall follow this schedule.

(c) If the licensee decides to cease engaging in activities authorized by the license, the licensee shall make that decision in a form satisfactory to the Department, such as resolution of the board of directors if the licensee is a corporation.

13. 310 CMR 30.851(2) is hereby amended by striking out said subsection and inserting in place thereof the following subsection:-

(2) The Department may modify a license upon its own initiative, upon request by a local board of health or other municipal authority, upon request by a licensee, or upon request of any interested person. If the Department decides to deny a request to modify a license, the Department shall send to the person making the request a brief written response giving a reason for the Department's decision. Except as provided in 310 CMR 30.890, denial of a request for modification of a license shall not be subject to public notice, public comment, or

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public hearings. If the Department tentatively decides to grant a request to modify a license, the Department shall proceed in accordance with 310 CMR 30.000.

14. 310 CMR 30.853 is hereby amended by inserting after subsection (2) the following subsection:-

(3) Any interested person may request the Department to suspend or revoke a license. If the Department decides to deny a request to suspend or revoke a license, the Department shall send to the person making the request a brief written response giving a reason for the Department's decision. Except as provided in 310 CMR 30.890, denial of a request to suspend or revoke a license shall not be subject to public notice, public comment, or public hearings.

15. 310 CMR 30.860(3) is hereby amended by striking out said subsection and inserting in place thereof the following subsection:-

(3) Shall clearly specify the hazardous wastes to be received or transported and the manner and location of their transport, treatment, use, or storage, which manner and location shall be in compliance with 310 CMR 30.000, except to the extent that the temporary emergency license expressly specifies otherwise because such compliance is determined by the Department to be not possible or not consistent with the emergency situation;

16. 310 CMR 30.901 is hereby amended by inserting after subsection (4) the following subsection:-

(5) An owner or operator who fulfills the requirements of 310 CMR 30.900 by establishing a trust fund or by obtaining a surety bond, letter of credit, or insurance policy shall be deemed to be in non-compliance with 310 CMR 30.900 if

(a) the amount of financial assurance provided is at any time less than the amount required; or

(b) the trust fund, surety bond, letter of credit, or insurance policy ceases to provide the required financial assurance; or

(c) the trustee or issuing institution is named as a debtor in a voluntary or involuntary proceeding pursuant to Title 11 (Bankruptcy) of the United States Code; or

(d) there is a suspension or revocation of the trustee's authority to act as trustee or of the issuing institution's authority to issue or keep in effect the surety bond, letter of credit, or insurance policy.

ADDITIONAL PROPOSED REGULATORY AMENDMENTS

The following proposed amendments are not needed to ensure that the Department receives final authorization:

1. 310 CMR 30.010 is hereby amended by striking out paragraph (4) of the definition of "waste" and inserting in place thereof the following paragraph:-

(4) Materials which have been approved by the Department for reuse pursuant to 310 CMR 30.355, combustion as a fuel pursuant to 310 CMR 30.356 and recycling pursuant to 310 CMR 30.381 through 30.383 are not wastes.

2. 310 CMR 30.061 is hereby amended by striking out subsection (3).

3. 310 CMR 30.061 is hereby further amended by redesignating subsection (4) as subsection (3).

4. 310 CMR 30.099(6)(b) is hereby amended by inserting at the end thereof the following sentence:- The owner or operator shall comply with 310 CMR 30.586 (Completion and Certification of Closure).

5. 310 CMR 30.099(6)(c) is hereby amended by striking out said division and inserting in place thereof the following division:-

(c) Subpart I (Use and Management of Containers). The owner or operator shall also comply with 310 CMR 30.682 governing the labelling and marking of containers.

6. 310 CMR 30.099(6)(d) is hereby amended by striking out said division and inserting in place thereof the following division:-

(d)1. Subpart J (tanks); the owner or operator shall also comply with 310 CMR 30.695(3) governing the labelling and marking of tanks; and

2. Unless it is technically infeasible to do so, each owner or operator of a facility which has one or more underground tanks which do not meet the secondary containment and monitoring standards set forth in 310 CMR 30.693(3) shall test such underground tank(s) and have on file at the site of generation and available for inspection by the Department the

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following certification from an independent Massachusetts registered professional engineer or by an independent person knowledgeable and familiar with the tank testing procedures which are utilized. The certification shall state that the tank(s) has been tested in accordance with 310 CMR 30.693(4)(a) and that the tank was found not to be leaking. If such owner or operator is unable to obtain such a certification by December 31, 1984, such owner or operator shall so notify the Department and repair the tank, remove the tank from service, or replace the tank with a new tank meeting the requirements set forth in 310 CMR 30.693(2) and 30.693(3). The Department may, at any time, require that the owner or operator conduct additional tests, at a frequency specified by the Department, in order to ensure that the tank is not leaking.

3. Each owner or operator of a facility which has one or more underground tanks which do not meet the secondary containment and monitoring standards set forth in 310 CMR 30.693(3) shall by December 31, 1984 comply with the requirements set forth in 310 CMR 30.693(7). Such owner or operator need not submit to the Department a description of the statistical test used to comply with 310 CMR 30.693(7)(b) but shall keep a description of the test on file at the site subject to inspection and approval by the Department. Inventory and material balance records shall be kept at the site for a period of at least three years.

4. An underground tank that has been shown to be leaking shall not be used for the storage or treatment of hazardous waste. The Department may require that any tank which the Department determines is structurally unsound be taken out of service, replaced, or repaired.

7. 310 CMR 30.131 is hereby amended by adding the following industry and EPA hazardous Waste No. and Hazardous Waste Listing:-

M004 Waste generated in the manufacture of paint which is not otherwise regulated as hazardous waste pursuant to 310 CMR 30.120 (characteristics of hazardous waste) if:

(1) The paint is formulated with one or more ingredients which are listed as hazardous constituents in 310 CMR 30.160; or

(2) The paint is formulated with any ingredient which contains one percent or more by weight of hazardous constituents listed in 310 CMR 30.160.

8. 310 CMR 30.201(2) is hereby amended by striking out said subsection and inserting in place thereof the following:-

(2) Any person who generates only waste oil is subject to the provisions of 310 CMR 30.200 and not the provisions at 310 CMR 30.300, except that such person shall be subject to 310 CMR 30.355, 30.356, 30.381, 30.382, and 30.384. A person who generates, in addition to waste oil, insignificant quantities (as defined in 310 CMR 30.353) of hazardous wastes may be deemed a person who generates only waste oil.

9. 310 CMR 30.202(6) and (7) are hereby amended by deleting said subsections and inserting in place thereof the following subsections:-

(6) Accumulation of waste oil as the site of generation by a large quantity generator shall be subject to the following:

- (a) 310 CMR 30.340(1)(a) governing accumulation in containers;
- (b) 310 CMR 30.340(1)(b) governing marking and labeling of containers and tanks;
- (c) 310 CMR 30.340(1)(c) governing pretransport requirements;
- (d) 310 CMR 30.340(2) governing accumulation for more than 90 days;
- (e) 310 CMR 30.695(1) governing materials of construction of tanks which are incompatible with wastes;
- (f) 310 CMR 30.696(1) governing the inspection of tanks;
- (g) 310 CMR 30.697, if applicable, governing special requirements for ignitable, reactive or incompatible wastes;
- (h) 310 CMR 30.698, governing closure;
- (i) Each new underground tank for the accumulation of waste oil shall be constructed of: non-corrodible materials, such as fiberglass reinforced plastic or its equivalent; steel with external bonded non-corrodible material; or cathodically protected steel; or each such tank shall be designed, constructed and monitored in compliance with 310 CMR 30.693(3). Each new underground tank shall be equipped with striker plates below openings used for liquid level measurement; and
- (j) By December 31, 1984, the owner or operator of each underground tank which does not meet the secondary containment and monitoring standards of 310 CMR 30.693(3), shall test each underground tank on a monthly basis by measuring the height of liquid in the tank with a dip stick, sealing the tank off for 24 hours, and measuring the height of the liquid once again. If the difference in the two measurements is greater than $\frac{1}{2}$ inch, the owner or operator shall notify the local fire chief and the Department immediately by the quickest available means and submit the results of the test to the Department within 7 days. The Department may require that:

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1. a more accurate test be conducted; or
2. the tank be repaired; or
3. the tank be removed from service.

On an annual basis, the owner or operator shall perform the test as required by 310 CMR 30.202(6)(j), except that the tank shall be sealed off for a period of 48 hours. The owner or operator shall maintain a log of each such test required by 310 CMR 30.202(6)(j) for a period of three years and keep such log at the site available for inspection by the Department. The owner shall sign the log, certifying that, to the best of his knowledge, the log is accurate.

7) A generator of only waste oil is a small quantity generator if that generator meets the requirements of 310 CMR 30.351(1) and (2). Accumulation of waste oil at the site of generation by a small quantity generator is subject to the provisions of 310 CMR 30.202(6), except that the requirements of 310 CMR 30.202(6)(d) need not be complied with.

10. 310 CMR 30.303 is hereby amended by inserting after subsection (2), the following subsection:-

(3) A generator who ceases to generate a hazardous waste shall submit to the Department, in writing, a change of status request. The generator shall follow such procedures, as may be required by the Department, to terminate his status as a generator of hazardous waste.

11. 310 CMR 30.351(3)(b) is hereby amended by striking out said division and inserting in place thereof the following division:-

(b) 310 CMR 30.303 - Obtain an EPA identification number and request change of status.

12. 310 CMR 30.353 is hereby amended by inserting after subsection (2) the following subsections:-

(3) A generator of hazardous waste who receives an insignificant quantity of waste from a generator of insignificant wastes shall manage such waste in compliance with 310 CMR 30.000.

(4) A person who receives an insignificant quantity of hazardous waste from two or more generators becomes a small quantity

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generator of hazardous waste if the total amount accumulated at any one time exceeds the insignificant quantities established pursuant to 310 CMR 30.353.

13. 310 CMR 30.356(3) is hereby amended by striking out said subsection and inserting in place thereof the following subsection.

(3) --If the Department grants approval of the combustion, the material will not be subject to the requirements of 310 CMR 30.000, provided that the material is combusted in compliance with the terms of the approval.

14. 310 CMR 30.356(4) is hereby amended by striking out the word "hazardous".

15. 310 CMR 30.382(8) is hereby amended by striking out divisions (g) through (i) and inserting in place thereof the following divisions:-

- (g) 310 CMR 30.580 - Closure;
- (h) 310 CMR 30.680 - Use and Management of containers;
- (i) 310 CMR 30.690 - Tanks; and
- (j) 310 CMR 30.900 - Financial Responsibility

16. 310 CMR 30.382(9) is hereby amended by striking out the word "conveyed" and inserting in place thereof the word:- transported.

17. 310 CMR 30.383(3) is hereby amended by striking out the first sentence and inserting in place thereof the following sentence:- Such notification shall specify the hazardous waste to be recycled, the amounts of each hazardous waste to be recycled, and the generator's specifications with respect to that material.

18. 310 CMR 30.383(7) is hereby amended by striking out from the first sentence the words:- transported and.

19. 310 CMR 30.383 is hereby amended by inserting after subsection (13) the following subsection:-

(14) Generators who have conducted recycling at the site of generation in a manner which is not "treatment which is an integral part of the manufacturing process" prior to July 1, 1984 and who continue to conduct such operation shall notify the Department in compliance with 310 CMR 30.383 no later than December 31, 1984.

20. 310 CMR 30.401(4) is hereby amended by inserting in the introductory sentence, following the words "common carrier", the words:- .or contract carrier.

21. 310 CMR 401 is hereby amended by inserting after subsection (5) the following subsection:-

(6) 310 CMR 30.400 applies to transporters who accept insignificant wastes, as that term is defined in 310 CMR 30.353, from more than one generator of insignificant waste such that the total amount accepted from all generators exceeds the quantities established as insignificant pursuant to 310 CMR 30.353, except that the provisions of 310 CMR 30.403, 30.404, 30.405 and 30.406 shall not apply.

22. 310 CMR 30.544 is hereby amended by striking out the first sentence of the introductory paragraph and inserting in place thereof, the following sentence:- The owner or operator of a licensed facility or wastewater treatment unit which does not receive any hazardous wastes from any off-site source shall prepare and submit an annual report to the Department by March 1 of each year.

23. 310 CMR 30.605(1)(c) is hereby amended by inserting at the end thereof the following sentence:- Hazardous waste activities at such facilities are regulated pursuant to 314 CMR 8.05.

24. 310 CMR 30.807(1) is hereby amended by striking out the introductory sentence and inserting in place thereof the following:-

(1) All license applications and all final licenses issued by the Department shall be signed as follows:

25. 310 CMR 30.807(2) is hereby amended by striking out the period at the end of the subsection and inserting in place thereof:- and the final license issued by the Department.

26. 310 CMR 30.807(3) is hereby amended by striking out said subsection and inserting in place thereof the following subsection:-

(3) Every person signing a hazardous waste license application and the final license issued by the Department shall do so in compliance with 310 CMR 30.006 and 30.009.

27. 310 CMR 30.904(1)(a) is hereby amended by striking out the period from the last sentence of said division and inserting in place thereof the words:- or the trustee shall be a national bank.

28. 310 CMR 30.904(4)(a) is hereby amended by striking out the period from the last sentence of said subdivision and inserting in place thereof the words:- or the institution shall be a national bank.

29. 310 CMR 30.904 is hereby further amended by inserting after subsection 8, the following subsection:-

(9) Use of financial mechanisms to provide funds for remedial action during the closure period.

At any time during the closure period, the Department may require that the financial assurances provided by using the options of 310 CMR 30.904(1), (2), (3), (4) or any combination thereof, be used by the owner or operator to provide funds for the taking of actions as may be necessary to prevent, minimize, or mitigate damage to the public health, safety, welfare or the environment which may result from a release of hazardous waste or hazardous constituents into the environment. Such actions may include, without limitation, the assessment of the extent or potential extent of such damage, the containment of hazardous waste or hazardous constituents that have been released into the environment or the removal of such hazardous waste or hazardous constituents. The owner or operator shall take such actions as directed by the Department. The Department may direct that such action be taken even if such actions are not specified as planned closure activities in the closure plan required pursuant to 310 CMR 30.580.

30. 310 CMR 30.906(1)(a) is hereby amended by striking out the period from the last sentence of said division and inserting in place thereof the words:- or the trustee shall be a national bank.

31. 310 CMR 30.906(4)(a) is hereby amended by striking out the period from the last sentence of said division and inserting in place thereof the words:- or the trustee shall be a national bank.

32. 310 CMR 30.906 is hereby further amended by inserting after subsection (8), the following subsection:-

(9) Use of Financial mechanisms to provide funds for remedial action during the post-closure period.

At any time during the post-closure period, the Department may require that the financial assurances provided by using the options of 310 CMR 30.906(1), (2), (3), (4) or any combination thereof, be used by the owner or operator to provide funds for the taking of actions as may be necessary to prevent, minimize or mitigate damage to the public health, safety, welfare or the environment which may result from a release of hazardous waste or hazardous constituents into the environment. Such actions may include, without limitation, the assessment of the extent or potential extent of such damage, the containment of hazardous waste or hazardous constituents which have been released into the environment, or the removal of such hazardous waste or hazardous constituents. The owner or operator shall take such actions as

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directed by the Department. The Department may direct that such action be taken even if such actions are not specified as planned post-closure activities in the post-closure plan required pursuant to 310 CMR 30.590.

33.. 310 CMR 30.908(4) is hereby amended by striking out said subsection and inserting in place thereof the following subsection:-

(4) Period of coverage. Each owner or operator shall continuously provide liability coverage for each facility throughout the facility's operating life, throughout the closure period, and for a period of five years beyond the date that the Department certifies closure of the facility pursuant to 310 CMR 30.586(2).

34. 310 CMR 30.908 is hereby further amended by inserting after subsection (4) the following subsection:-

(5) Changes in the Insurance company, policy or instrument. Whenever the owner or operator renews assurances of financial responsibility to comply with 310 CMR 30.908, such assurances, if renewed under a different instrument, company or policy, shall provide coverage for all acts occurring during the period covered by the original instrument company or policy.

PROPOSED AMENDMENTS AND ADDITIONS

TO

310 CMR 7.00 AND 7.08

HAZARDOUS WASTE INCINERATOR REGULATIONS

BACKGROUND

The Federal Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) and the Massachusetts Hazardous Waste Management Act, General Laws Chapter 21C, require the Department to adopt certain regulations for the management of hazardous wastes.

In April, 1983, the Department held public hearings to adopt regulations to control emissions from hazardous waste incinerators. The Department received a substantial number of comments. The following outstanding issues were raised which needed further clarification:

1. Potential health risks from emissions
2. Regulation of products of incomplete combustion (PICs)
3. Procedures for selection of principle organic hazardous constituents (POHCs) in the waste stream for the performance test
4. Monitoring

On August 30, 1983, the Department adopted a policy stating that until the outstanding issues were resolved, the Department would not issue licenses for new hazardous waste incinerators which accept waste generated off the site where the incinerator is located. The Department would consult with anyone planning to apply for such a license. The policy does not affect hazardous waste incinerators in existence as of October 15, 1983, or new hazardous waste incinerators which incinerate only wastes generated at the site where the incinerator is located.

In October, 1983, the Department amended Regulations 310 CMR 7.00, 7.02, and 7.08 to control emissions from hazardous waste incineration. The above-mentioned policy remains in effect.

The Department's response to the outstanding hazardous waste incineration issues is described in the following pages. It is the Department's opinion that the proposed regulations for hazardous waste incineration together with existing air pollution control regulations, used with current policies and procedures for reviewing and approving air pollution sources, will provide the control necessary to protect public health and the environment.

The Department proposes to adopt these regulations under the provisions of Massachusetts General Laws Chapter 111, Sections 142B and 142D (Air Pollution Control Enabling Legislation) and Chapter 21C, Sections 6 and 8. The provisions of Chapter 21C contain penalties for violations of regulations adopted thereunder which are much more severe than those contained in Chapter 111.

THE REGULATIONS

The proposed amendments to the recently adopted regulations for controlling hazardous waste incinerator emissions clarify the Department's process for licensing hazardous waste incineration facilities.

Prior to construction or reconstruction, all new and modified hazardous waste incinerators are required to submit an application and be granted Department approval under the provisions of 310 CMR 7.08(4), and must be issued a license under the provisions of 310 CMR 30.000. The review and approval process requires Department review of submitted proposed plans, specifications, and standard operating and maintenance procedures.

1. Many commenters asked how the Department will determine the health risks associated with hazardous waste incinerator emissions.

For air contaminants that do not have an EPA-established National Ambient Air Quality Standard, the Department presently establishes an acceptable ambient concentration for each air contaminant on a case-by-case basis by reviewing available health effects information. To date, the Department has done this for only a limited number of air contaminants, due to the extensive time required for review. Regulation 310 CMR 7.01 requires that emissions not cause a condition of air pollution. A copy of Section 7.01 and the associated definitions is included with the proposed amendments.

The Department is currently developing a comprehensive approach to establish standards for acceptable ambient air concentrations of toxic substances. To date, health assessments have been made on 98 chemicals in an effort to fine tune a generic system to assess and rank chemicals. This will be used as the basis for determining acceptable ambient concentrations. The framework for this program is expected to be in place by July, 1984. Until this program is established, the Department will continue to evaluate potentially toxic air contaminants on a case-by-case basis. After the air toxics program is more fully developed, it is expected that regulations will be promulgated.

2. Many comments received at the public hearing addressed emissions of products of incomplete combustion (PICs). PICs are compounds that were either present at very low concentration in the waste stream or were formed during the combustion process. These new compounds may be more toxic than the compounds from which they formed.

The concentration of PICs in the emissions will generally be less than the concentration of POHCs. Although a few compounds are frequently identified as PICs in the combustion gas, it cannot be reliably predicted for a given incinerator burning a specific waste, what PICs will be formed and in what concentrations.

Under the present regulations, a performance test is required for each incinerator before it receives a license. The purpose of the test is to demonstrate that the incinerator emissions will not exceed the limits contained in the regulations or cause a condition of air pollution.

The Department proposes that during the performance test, the facility determine the specific concentrations of the five compounds with the highest concentrations present in the flue gas, other than POHCs. It will then determine if these concentrations will result in a violation of 310 CMR 7.01. (Note: The determination of five will be a guide: depending on waste feed and other variables, more or less than five PICs will have to be identified and quantified. The goal of PICs regulation is to assure compliance with 310 CMR 7.01 and this will have to be determined on a case-by-case basis.) The Department cannot issue the facility a license until the performance test has been completed, and the public has had an opportunity to comment on the results as part of the licensing process.

A new section, 310 CMR 7.08(4)(h)4, and additional language to 310 CMR 7.08(4)(j) have been added to clarify that emissions of PICs must comply with 310 CMR 7.01. In addition, emissions of other air contaminants will be evaluated to determine if ambient concentrations will be at an acceptable level.

3. The existing regulation states that the Department will consider the toxicity, concentration, and degree of difficulty to incinerate when selecting POHCs for the performance test. The Department intends to choose up to six POHCs for each test. One or two of the most toxic compounds will be chosen as well as compounds present at the highest concentrations and predicted to be difficult to incinerate.

EPA recommends using heat of combustion as a measure of degree of difficulty to incinerate, but it is not necessarily the single best measure. The Department will also consider the autoignition temperature, and any other measure deemed to be appropriate.

In addition, the definition of POHC has been amended to require that a constituent must be present in the waste stream at a concentration of at least 100 ppm to be considered a POHC. If the constituent is present in the waste stream at less than 100 ppm, the performance test must be run for an extended period of time to assure the constituent occurs in the flue gas in a sufficient quantity to confirm that a destruction and removal efficiency (DRE) of at least 99.99% is being achieved.

One difficulty with including this requirement for POHCs is that it may be desirable to list a constituent as a POHC that is present in the waste at less than 100 ppm. As a practical matter, the waste feed can be spiked with more of the constituent to ensure that there will be detectable levels of the constituent present in the combustion gas.

requirement that the concentration of a substance must be at least 100 ppm for it to be identified as a POHC.

4. The Department also proposes that each hazardous waste incinerator monitor the level of CO, CO₂, and O₂ in the combustion gas, the waste feed and supplementary fuel rate(s), combustion temperature and combustion gas velocity. Comments are requested on the necessity of monitoring all these parameters.

Additionally, two new subsections, 310 CMR 7.08(4)(1)4 and 7.08(4)(1)5 are proposed. These proposed amendments add inspection and recordkeeping requirements. These amendments are required in order to receive authorization from EPA.

Legend

Please Note

The Department is proposing certain additions to its Air Pollution Control Regulations concerning hazardous waste incineration. The bulk of existing regulations dealing with hazardous waste incineration are reproduced here for the reviewers information.

Proposed additions to the regulations are identified as those words contained in brackets < >.

Definitions:

PRINCIPAL ORGANIC HAZARDOUS CONSTITUENT (POHC) means a specific hazardous waste constituent(s) which is listed in 310 CMR 30.160 or otherwise specified by the Department, which is in a hazardous waste incinerator waste feed <at a concentration equal to or greater than 100 ug/g>, and for which the Department determines that a performance standard shall apply. In determining whether a hazardous waste constituent shall be a POHC, the Department shall consider the degree of difficulty to incinerate <(e.g., heat of combustion, autoignition temperature, etc.)>, concentration or mass in the waste feed, toxicity, and other factors as determined by the Department.

<PRODUCTS OF INCOMPLETE COMBUSTION (PICs)> means organic compounds in a hazardous waste incinerator flue gas other than principal organic hazardous constituents (POHCs).>

(4) Hazardous Waste Incinerators

(a) No person shall construct, reconstruct, alter, or modify or operate, or cause, suffer, allow or permit the construction, reconstruction, alteration, modification, or operation of, any hazardous waste incinerator unless such construction, reconstruction, alteration, modification, or operation is in compliance with:

1. 310 CMR 7.01, 7.08(4), and all other provisions of these Regulations,
2. the terms of a Department approval granted pursuant to these Regulations,
3. all applicable provisions of 310 CMR 30.000 and/or 314 CMR 8.00, and
4. the terms of a license or permit granted by the Department pursuant to 310 CMR 30.000 and/or 314 CMR 8.00.

Noncompliance with any provision of 310 CMR 30.000, or of a license granted pursuant to 310 CMR 30.000, shall be deemed noncompliance with, and shall be subject to all applicable provisions of, G.L. c. 21C.

Noncompliance with any provision of 314 CMR 8.00, or of a permit granted pursuant to 314 CMR 8.00, shall be deemed noncompliance with, and shall be subject to all applicable provisions of, G.L. c. 21, §§26 through 53. No approval granted by the Department shall affect the responsibility of the owner or operator to comply with all other applicable laws and regulations.

(b) No person shall construct, reconstruct, alter, or modify, or cause, suffer, allow or permit the construction, reconstruction, alteration, or modification of, any hazardous waste incinerator unless the plans, specifications, proposed Standard Operating Procedure, and the proposed Maintenance Procedure for such hazardous waste incinerator have been submitted to the Department for approval, and the Department has granted such approval in writing. The Department may prescribe a form and/or other application methods which shall be used by each person applying for such approval from the Department.

(c) Each application for approval to construct, reconstruct, alter, or modify a hazardous waste incinerator shall be in compliance with the requirements set forth in 310 CMR 30.001 through 30.099 (General Provisions, e.g., Definitions; Requirements for Accurate, Timely and Complete Monitoring, Record-Keeping and Submittals to the Department; Notification Procedures; and Transition Provisions) and.

30.800 (Licensing Requirements and Procedures) and shall

1. be signed by the owner or operator of the hazardous waste incinerator;
2. be accompanied by site information, plans, descriptions, specifications, and drawings showing the design of the hazardous waste incinerator, the nature and amount of emissions, and the manner in which the hazardous waste incinerator will be operated and controlled;
3. specify waste feed(s), including, for each, the anticipated heating value, viscosity, description of the physical form of the waste, and identification and quantification of hazardous waste constituents listed in 310 CMR 30.160 by the use of analytical techniques specified in "Test Methods for Evaluating Solid Waste", United States Environmental Protection Agency SW-846, 1980;
4. include a detailed description of the hazardous waste incinerator, including at least the following:
 - a. the incinerator's model number and type, and the name of its manufacturer;
 - b. the linear dimensions of the incinerator unit and the cross sectional area of the combustion chamber(s);
 - c. the auxiliary fuel system (type/feed);
 - d. the capacity of the prime mover;
 - e. the automatic cutoff system(s);
 - f. the stack gas monitoring and pollution control equipment;
 - g. the design of the nozzle and burner;
 - h. the construction materials; and
 - i. each device for indicating and/or controlling temperature, pressure, and/or flow, including the location of each such device;
5. include the applicant's proposed standard operating procedure and proposed maintenance procedure, which shall include, but not be limited to, procedures for:
 - a. incinerator startup and operation prior to, during, and immediately following emission testing, and
 - b. long term incinerator operation.

< c. sampling and analysis of waste feeds, including the frequency thereof.>

Such procedures shall include procedures for rapidly shutting down the waste feed and the incinerator, and controlling emissions, in the event of equipment malfunction. Such procedures shall, to the satisfaction of the Department, indicate that the incinerator will operate in compliance with the emission limitations set forth in 310 CMR 7.08(4);

6. include a proposed emission test protocol <, for demonstrating compliance with the emission limitations contained in 310 CMR 7.08(4)(h),> which

shall include at least the following: sampling and analysis procedures and equipment, sample locations, frequency and duration of sampling, anticipated test dates, duration of testing, quantity of waste to be burned, range(s) of temperature(s), waste feed rate, combustion gas velocity, auxiliary fuel use, and all other parameters which may affect the performance of the incinerator;

7. include whatever other information, plans, specifications, evidence, or documentation the Department may request; and

8. bear the seal and signature of a professional engineer, registered in the Commonwealth pursuant to G.L. c. 112 as amended, on all engineering plans, specifications, and other material submitted in or with the application.

(d) The Department may approve the construction, reconstruction, alteration, or modification of a hazardous waste incinerator only if the Department is persuaded that: **

1. emissions from the incinerator would not result in air quality exceeding the Massachusetts or National Ambient Air Quality Standards;

2. emissions from the incinerator would not result in noncompliance with 310 CMR 7.01 or any other provision of these Regulations;

3. a proposed incinerator to be constructed in a non-attainment area would not have a potential to emit equal to or greater than 100 tons per year of the contaminant upon which the non-attainment status is based (e.g., particulate matter, sulfur oxides, nitrogen oxides, volatile organic compounds, or carbon monoxide), unless the incinerator is in compliance with the requirements of 310 CMR 7.00, Appendix A (1) - (6), Emission Offsets and Non-Attainment Review;

** In addition to the requirements contained herein, major new sources of air contaminants and major modifications of existing sources located in attainment areas are subject to Prevention of Significant Deterioration (PSD) regulations in 40 CFR §52.21. Effective July 1, 1982, the PSD program is implemented by the Department in accordance with the Department's "Procedures for Implementing Federal Prevention of Significant Deterioration Regulations".

4. a proposed modification of an incinerator in a non-attainment would not produce a significant increase in emissions of the contaminant upon which the non-attainment status is based (e.g., particulate matter, sulfur oxides, nitrogen oxides, volatile organic compounds, or carbon monoxide), unless the incinerator is in compliance with the requirements of 310 CMR 7.00, Appendix A (1) - (6), Emissions Offsets and Non-Attainment Review; and

5. a proposed incinerator, subject to 310 CMR 7.00, Appendix A (1) - (6) (a major source or major modification) would not have total allowable emissions which, when added to allowable emissions from

a. existing facilities in the pertinent regions, and

b. new or modified sources in the pertinent region, which sources are not major emitting facilities,

would, by the time that the incinerator is to commence operation, exceed the total emissions from existing sources allowed under the applicable SIP (prior to the application for such permit to construct or modify) by such an amount as to be inconsistent with "reasonable further progress" as defined in the Massachusetts State Implementation Plan (SIP).

(e) The Department may impose any reasonable condition upon an approval, including, but not limited to:

1. compliance with record-keeping requirements set forth in 310 CMR 30.542;
2. limitations on waste feed;
3. waste feed rates;
4. operating conditions during start-up, prior to, and during emission testing;
5. long term operating conditions;
6. requiring the hazardous waste incinerator to be provided with
 - a. sampling ports of such size, number, and location as the Department may require, and safe access to each port, and
 - b. instrumentation to monitor and record emission data;
7. quantitative analysis of the scrubber water, if any, the ash residues, and other residues, if any, for the purpose of estimating the fate of the trial POHCs; and
8. any other sampling and/or testing equipment.

- (f) The Department may revoke an approval if:
1. construction is not begun within 4 years from the date of issuance of the approval; or
 2. during construction, work is suspended for 2 years; or
 3. there is any other lawful cause.

(g) For each hazardous waste incinerator whose construction was not completed prior to October 15, 1983, all provisions of 310 CMR 7.08(4) shall take effect on October 15, 1983. For each hazardous waste incinerator whose construction was completed prior to October 15, 1983:

1. all provisions of 310 CMR 7.08(4)(a) through (g) shall take effect on October 15, 1983; and
2. within 9 calendar months after the date on which a license application is required to be submitted to the Department pursuant to 310 CMR 30.099(6), either
 - a. comply with 310 CMR 7.08(4)(b), (c), and (h) through (l), or
 - b. persuade the Department that more time is needed to comply with 310 CMR 7.08(4)(h) through (l), and submit to the Department a proposed plan and schedule for such compliance. Said plan and schedule are subject to review and approval by the Department and shall provide for compliance with 310 CMR 7.08(4)(b), (c), and (h) through (l) as expeditiously as practicable, and in any event no later than 24 months after the date on which a license application is required to be submitted to the Department pursuant to 310 CMR 30.099(6). Such proposed plan and schedule shall be submitted in compliance with all applicable requirements set forth in 310 CMR 7.08 and in 310 CMR 30.000 and/or 314 CMR 8.00.

(h) Except as provided in 310 CMR 7.08(4)(g), no person owning, leasing, or controlling the operation of any hazardous waste incinerator shall cause, suffer, allow, or permit emissions therefrom in excess of the following emission limitations:

1. for each waste feed, a hazardous waste incinerator shall achieve a destruction and removal efficiency (DRE) of 99.99% for each Principal Organic Hazardous Constituent (POHC)

designated in the Department's approval. DRE shall be determined for each POHC from the following equation:

$$DRE = \frac{(W_{in} - W_{out})}{W_{in}} \times 100\%$$

where:

W_{in} = Mass feed rate of one POHC in the waste stream feeding the incinerator, and

W_{out} = Mass emission rate of the same POHC present in exhaust emissions prior to release to the atmosphere;

2. For a hazardous waste incinerator with the potential to emit hydrogen chloride (HCl) at a rate equal to or greater than four pounds per hour, such HCl emissions shall be limited to no greater than the larger of either four (4) pounds per hour or 1% of the HCl in the combustion gas prior to entering any air pollution control equipment;

3. Particulate emissions from a hazardous waste incinerator shall not exceed 0.08 grains per dry standard cubic foot when corrected for the amount of oxygen in the stack gas according to the formula

$$P_c = P_m \times \frac{14}{21 - Y}$$

Where:

P_c = the corrected concentration of particulate matter.

P_m = the measured concentration of particulate matter, and

Y = the measured concentration (percent by volume, dry) of oxygen in the stack gas.

< 4. Emissions of products of incomplete combustion (PICs) shall be limited to the degree necessary to comply with 310 CMR 7.01.>

(i) Each person owning, leasing, or controlling the operation of a hazardous waste incinerator shall, for the purposes of demonstrating compliance with the emission limitations contained in 310 CMR 7.08(4)(h), conduct or have conducted performance tests in accordance with the following:

1. For a newly constructed, substantially reconstructed, or altered incinerator, performance tests shall be conducted as soon as possible as determined by the Department, but in no case later than 720 hours of operation or 120 calendar days, whichever comes first, after the initial introduction into the incinerator of each waste feed specified in a Department approval.
2. For a hazardous waste incinerator subject to 310 CMR 7.08(4)(g) or for any hazardous waste incinerator for which the Department is of the opinion that performance tests are necessary to demonstrate compliance with 310 CMR 7.08(4)(h), each person owning, leasing, or controlling the operation of such incinerator shall conduct performance tests within 90 days of written notification from the Department that such tests are required.

(j) Performance tests for comparison with the emission limitations contained in 310 CMR 7.08(4)(h) shall be conducted in accordance with methods as approved by the Department and in conformance with the requirements of 310 CMR 7.13. The results of such performance tests shall be submitted to the Department no later than 90 days after completion of the actual emission testing, shall be submitted in accordance with 310 CMR 30.807 < and shall include an analysis demonstrating that the emissions of products of incomplete combustion comply with 310 CMR 7.01.>

(k) No person shall cause, suffer, allow, or permit the operation of any hazardous waste incinerator that is not equipped with instrumentation which is properly maintained in an accurate operating condition and operated continuously to indicate and record the (1) carbon monoxide <,carbon dioxide, and oxygen> level<s> in the stack exhaust gas, (2) waste feed <and supplementary fuel> rate <s>, (3) combustion temperature, and (4) combustion gas velocity. The instrumentation and its installation shall be as approved by the Department in accordance with 310 CMR 7.08(4).

7.08 continued

(1) No person shall cause, suffer, allow, or permit the operation of any hazardous waste incinerator unless said operation is in conformance with the following:

1. During start-up and shutdown, hazardous waste shall not be fed into the incinerator unless the incinerator is operating within the conditions of operation as specified in the Department's approval; and

2. Fugitive emissions from the combustion zone shall be controlled by (1) keeping the combustion zone totally sealed against fugitive emissions; or (2) maintaining a combustion zone pressure lower than atmospheric pressure; or (3) an alternative means of fugitive emissions control equivalent to maintenance of combustion zone pressure lower than atmospheric pressure as approved by the Department; and

3. Each hazardous waste incinerator shall be equipped with a functioning system to automatically cease operation of the incinerator when change(s) in waste feed, incinerator design, or operating conditions exceed limits as designated in a Department approval. Such systems shall be tested at least weekly to verify operability.

< 4. At least once each day during which it is operated, each hazardous waste incinerator and associated equipment (for example, pumps, valves, conveyers, and pipes) shall be subjected to thorough visual inspection for leaks, spills, fugitive emissions, and signs of tampering.

5. All monitoring and inspection data shall be recorded and the records shall be placed in the operating log required by 310 CMR 30.542.>

STATUTORY AUTHORITY:

M.G.L. c. 111, §142A-142D and M.G.L. c. 21C, Sections 6 & 8

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
RECORDS

1. Name of the person or organization to whom the record pertains
2. Date of the record
3. Description of the record

4. Name of the person or organization who created the record
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32. Date of the record
33. Description of the record

The Commonwealth of Massachusetts
Department of Environmental Quality Engineering
Notice

Notice is hereby given that the Department of Environmental Quality Engineering, acting in accordance with the provisions of G.L. c. 21C, ss. 4 and 6 and G.L. c. 111, ss. 142A-142D, will hold six (6) public hearings. The hearings will accomplish three purposes:

First, the hearings will provide opportunity for comment on the proposal to make permanent emergency regulations which were promulgated by the Department on March 15, 1984 and published in the Massachusetts Register on March 22, 1984. The emergency regulations amended several provisions of, and added several provisions to 310 CMR 30.000. These provisions govern the generation, transportation, storage, treatment, disposal and recycling of hazardous waste.

Second, the hearings will provide opportunity for comment on other proposed amendments and additions to 310 CMR 30.000 and to 310 CMR 7.00 and 7.08(4) governing hazardous waste incinerators.

Third, the hearings are intended to comply with 40 CFR 271.20(a)(4), which requires a state intending to seek final authorization pursuant to Section 3006(b) of the U.S. Resource Conservation and Recovery Act to provide opportunity for the public to express its views on the proposed state hazardous waste program. DEQE intends to submit the Massachusetts application for final authorization by July 1, 1984.

Copies of the emergency regulations, the proposed new regulations, and the proposed application for final authorization are available for inspection at each Regional Planning Agency and each DEQE regional office. Copies may be obtained, free of charge, at the DEQE Boston office, one Winter Street. The public hearings will be held as follows:

May 14 7:30-9:30 p.m.	Worcester UMass Med Ctr Amphitheater III	May 15 10 a.m.-Noon	Boston DEQE One Winter St. 10th fl conf rm	May 17 7:30-9:30 p.m.	Holyoke Holyoke Comm College Forum Bldg. Room C-311
May 21 7:00-9:00 p.m.	Haverhill No Essex Comm Coll 100 Elliot Street Library Res Ctr Section B	May 22 7:30-9:30 p.m.	Fall River City Hall 1 Govt Ctr Council hearing rm	May 24 7:00-9:00 p.m.	Pittsfield City Hall 66 Allen St City Council Chambers

Testimony may be presented orally and/or in writing at the public hearings. Testimony on the emergency regulations may be submitted in writing no later than May 24, 1984. Testimony on all other proposed regulatory amendments and additions may be submitted in writing no later than June 7, 1984. Written comments shall be addressed to:

Larry Giarrizzo, Director
Regulatory Task Force
Division of Hazardous Waste
One Winter St., 5th Floor
Boston, MA 02108

By Order of the Department



Anthony D. Cortese, ScD, Commissioner

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THE UNIVERSITY OF CHICAGO
DIVISION OF THE PHYSICAL SCIENCES
DEPARTMENT OF CHEMISTRY
530 SOUTH EAST ASIAN AVENUE
CHICAGO, ILLINOIS 60607

1980

1. The first part of the paper is devoted to a discussion of the general principles of the theory of the structure of the liquid phase of the system under consideration. It is shown that the structure of the liquid phase is determined by the nature of the interactions between the particles of the system and the nature of the external field.

2. In the second part of the paper, the results of the calculations of the structure of the liquid phase of the system under consideration are presented. It is shown that the structure of the liquid phase is determined by the nature of the interactions between the particles of the system and the nature of the external field.

3. In the third part of the paper, the results of the calculations of the structure of the liquid phase of the system under consideration are presented. It is shown that the structure of the liquid phase is determined by the nature of the interactions between the particles of the system and the nature of the external field.

4. In the fourth part of the paper, the results of the calculations of the structure of the liquid phase of the system under consideration are presented. It is shown that the structure of the liquid phase is determined by the nature of the interactions between the particles of the system and the nature of the external field.

5. In the fifth part of the paper, the results of the calculations of the structure of the liquid phase of the system under consideration are presented. It is shown that the structure of the liquid phase is determined by the nature of the interactions between the particles of the system and the nature of the external field.

6. In the sixth part of the paper, the results of the calculations of the structure of the liquid phase of the system under consideration are presented. It is shown that the structure of the liquid phase is determined by the nature of the interactions between the particles of the system and the nature of the external field.

7. In the seventh part of the paper, the results of the calculations of the structure of the liquid phase of the system under consideration are presented. It is shown that the structure of the liquid phase is determined by the nature of the interactions between the particles of the system and the nature of the external field.



ANTHONY D. CORTESE, Sc. D.
Commissioner

The Commonwealth of Massachusetts

Executive Office of Environmental Affairs

Department of Environmental Quality Engineering

One Winter Street, Boston 02108

April 2, 1984

Dear Citizen:

I am pleased to send you the enclosed copy of the Public Hearing Draft on amendments and additions to the Massachusetts comprehensive hazardous waste management regulations. These regulations are drafted under the authority of the Hazardous Waste Management Act, G.L. c. 21C, as amended.

The Department, with the invaluable assistance of the Hazardous Waste Advisory Committee, has developed these regulatory amendments and additions with two goals in mind:

- (1) To ensure that Massachusetts receives authorization to administer its hazardous waste program in lieu of the Federal program; and
- (2) To further strengthen or clarify regulations governing the generation, transportation, treatment, storage and disposal of hazardous waste in order to better achieve the objective of protecting public health and safety and the environment.

The process of developing and further refining the hazardous waste management program is ongoing. The Department does not have all the answers. We will continue to benefit from the cooperation of industry, environmental groups, and other concerned citizens in addressing the complex issues inherent in regulating hazardous waste management.

After reviewing this Public Hearing Draft, I hope that you will comment on it and that you will attend one of the public hearings to be held by the Department in May. Your comments will be carefully considered as we continue to develop and amend the hazardous waste regulations and will be used to help improve the program of hazardous waste management in Massachusetts.

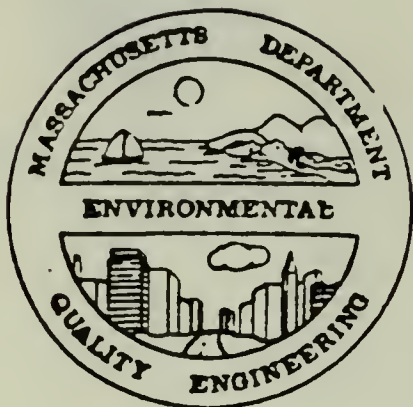
Very truly yours,

A handwritten signature in cursive script that reads "Anthony D. Cortese".

Anthony D. Cortese, Sc.D.
Commissioner

ADC/LG/am

MASS. EA20.2: H33/Draft/1984-Apr



The Commonwealth of Massachusetts

Executive Office of Environmental Affairs

Department of Environmental Quality Engineering

Division of Hazardous Waste

Hazardous Waste Management Regulations for Massachusetts

(Hazardous Waste Management Act, GLc21C)

Public Hearing Draft

Amendments and Additions to Regulations

April, 1984

COLLECTION

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Secretary, E.O.E.A.

Anthony D. Cortese

Commissioner, D.E.Q.E.

William F. Cass

Director, D.H.W.